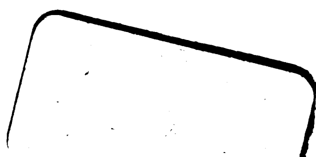






A NEW ANALYSIS OF CHRONOLOGY AND GEOGRAPHY, HISTORY AND PROPHECY:

IN WHICH

THEIR ELEMENTS

ARE ATTEMPTED TO BE EXPLAINED, HARMONIZED, AND VINDICATED,

UPON SCRIPTURAL AND SCIENTIFIC PRINCIPLES;

TENDING TO REMOVE THE IMPERFECTION AND DISCORDANCE OF PRECEDING SYSTEMS, AND TO OBVIATE THE CAVILS OF SCEPTICS, JEWS, AND INFIDELS.

BY THE

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SECOND EDITION, CORRECTED AND IMPROVED.

IN FOUR VOLUMES.

VOL. I.

CHRONOLOGY AND GEOGRAPHY.

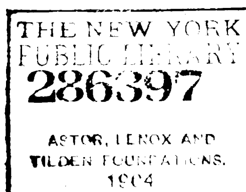
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PREFACE

TO THE FIRST EDITION.

This work is the result of many years' study of the History, Antiquities, and Prophecies, respecting the principal nations recorded in the Bible; namely, the *Hebrews, Israelites,* and *Jews,* the *Assyrians, Babylonians,* and *Egyptians,* the *Medes* and *Persians,* the *Grecians* and *Romans,* the *Saracens* and *Turks.*

It was originally suggested, by the frequent interruptions and embarrassments experienced by the author in his Historical Researches, from the imperfection and discordance of the Chronological systems of the *Jews, Scaliger, Petavius, Usher, Lloyd, Marsham, Newton, Jackson,* &c. which he found utterly insufficient to adjust and harmonise the leading dates of Sacred and Profane History; all of them differing from each other, more or less, in the principles upon which they were founded, and in the application of these principles; sometimes adjusting Sacred by Profane Chronology, sometimes the reverse, without any settled rule or standard.

Finding it impossible to extract from these systems any uniform scheme which could render Sacred History

consistent with itself, and with the great range of Profane History connected therewith, he endeavoured to trace the subject to its original sources, and to explore the most ancient records, chronicles, and fragments still extant, and the earliest Historians and Chronologers; namely, the *Masorete* and *Samaritan Hebrew* Texts; the *Vatican* and *Alexandrine* Greek Versions; the works of *Josephus, Theophilus, Eusebius, Syncellus, Abulfaragi,* and *Eutychius;* the Greek and Latin Historians, *Herodotus, Xenophon, Diodorus Siculus, Ctesias, Justin,* &c.; the fragments of *Sanchoniatho, Berosus,* and *Manetho,* respecting the *Phœnician, Chaldean,* and *Egyptian* antiquities, and the *Hindu* records published in the *Asiatic Researches.*

His first attempt was to examine carefully the principles upon which the reigning systems were built, in order to seek a solid foundation for a general system. This led him into a minute investigation of the evidences for and against the longer and shorter computations of the Patriarchal generations from *Adam* to *Abraham,* found in the *Masorete* and *Samaritan* Hebrew Texts, in the *Greek* Version, and in *Josephus;* and the result was, a conviction of the untenableness of the shorter computation, which he discovered to have been first fabricated by the *Jews,* about the time of the publication of the *Seder Olam Rabba,* their great system of Chronology, in A.D. 130.

His next attempt was to retrieve the genuine Chronology of *Josephus,* many of whose leading dates had been adulterated by his early editors, in order to make them correspond with the Jewish system, which unfortunately was too soon adopted by several of the primi-

tive Christian writers. And at length, by repeated trials, amidst the mass of spurious dates that pervade his works at present, he found a few genuine ones, which led to the discovery of his original system; a system which he flatters himself is now established by a connected chain of *analytical* and *synthetical* argument, shewing the conformity of the general outline, with the particular periods that compose it, in detail; and also, by its agreement with that of the first Christian Chronologer, *Theophilus*, Bishop of Antioch, in A.D. 168, according to the representation of *Abulfaragi*, the celebrated Armenian annalist. And the rectified era of the Creation, B.C. 5411, furnished by both conjointly, forms the basis of the present system; which, if it be found just in its principles, and correct in its construction, will, he trusts, reconcile Sacred and Profane Chronology together more satisfactorily than any that has been hitherto submitted to the inspection of the learned.

The usual arrangement of the received systems of Chronology seemed also to require emendation. Those of *Petavius*, *Usher*, *Prideaux*, &c. exhibit an intermixture of Sacred and Profane History, a variety of controversial discussions, and of elaborate digressions, which tend to render their works prolix and perplexing to readers who might wish to confine their attention to one branch of Chronology at a time, and to acquire a clear and connected view of Sacred by itself, and of the several branches of Profane by themselves. He has therefore treated of each branch separately. To simplify the subject still more, he has thrown into a copious *Introduction* matters merely of a controversial nature, as far as could be effected; and has there discussed the

present state of Chronology, the evidences for and against the shorter *Hebrew* and longer *Greek* computations, the defects of the reigning systems, and the rectification of those of *Josephus* and *Theophilus*.

As a previous *Apparatus* necessary for Chronological computation, he has annexed to the Introduction, Elements of *Technical Chronology*, explaining the usual measures of time, *days*, *weeks*, *months*, *years*, &c. employed by different nations; a correcter standard of *reigns* and *generations* founded upon extensive observation of their mean lengths; the principal *eclipses* noticed in history, which preceded the destruction of *Jerusalem;* the leading *epochs*, *eras*, and *periods*, used in Sacred and Profane Chronology, and the principles upon which they are adjusted; a new translation and correction of the Chronicle engraved on the *Arundelian* or *Parian* marbles, and a discovery of two different principles of computation employed therein; a vindication of the admirable Canon, incorrectly supposed to have been originally framed by *Ptolomy*, &c.

To this Apparatus of *Technical Chronology*, it was found necessary to add a *Geographical* Apparatus, in order to remedy the imperfection or incorrectness of the explanations of Sacred Geography given by *Wells*, *Cellarius*, *Reland*, &c. in several material points; such as the universality and course of the *deluge;* the passage of the *Red Sea* by the Israelites; their stations or encampments in the deserts of *Arabia Petræa*, from the time of their exode from *Egypt*, till their arrival in the land of *Canaan;* according to Bishop *Clayton's* Map and explanation; a more correct Map of the city of *Jerusalem*, and its environs, &c. with a variety of mis-

cellaneous remarks on subjects of importance, which had been originally inserted in the body of the work, but are now detached from thence, not to interrupt the reader's attention from the main course of the argument.

Sacred Chronology, which forms the first and most important branch, and furnishes the standard, by reference to which all the rest have been adjusted, is divided into distinct periods of time, reaching from the Creation of the World to the destruction of *Jerusalem* by *Titus*. Under each period, is given a general outline of the history, and of the principal Chronological prophecies, respecting the descent and advents of Christ, from the original promise given to our first parents, and afterwards more distinctly and circumstantially revealed to succeeding prophets, *Noah, Abraham, Isaac, Jacob, Moses, Balaam, Nathan, David, Solomon, Isaiah, Jeremiah, Ezekiel, Daniel*, &c. until their last and fullest revelation by our Lord and his *Apostles*. Indeed, to delineate the outline of the grand prophetic period of 2300 days, foretold by the Prophet *Daniel*, which includes the fortunes of the *Jewish* Church, (and of the *Christian* also), from *Nehemiah's* reformation of the Jewish polity, to its final restoration at the end of the desolation; intimated likewise in several other prophecies yet unfulfilled; was the author's chief motive for devoting so much of his time and attention to these studies.

Of *Profane Chronology*, the *Assyrian*, from its remote antiquity, and early connection with Holy Writ, first solicits attention. In this the author acknowledges his obligations to the works of the learned Mr. *Jackson*, for the sagacious distinction between the first and second *Belus*, of whom the former seems to have been the

Nimrod of Scripture, and the *Ninus* of the Greeks, who founded the *Assyrian* empire; and between the second *Belus* and the second *Ninus*, of *Ctesias*, and *Justin*, the refounder of the *Assyrian* monarchy. He is also indebted to Dr. *Gillies*, in his recent *History of the World*, from *Alexander* to *Augustus*, for a judicious correction of the received Assyrian Chronology, by reducing the number of kings from *Ninus* II. to *Sardanapalus*, and the duration of their reigns, to nearly half the amount of each found in the extravagant list of *Ctesias*. A reduction warranted by the surer authorities of *Herodotus*, *Diodorus Siculus*, and *Dionysius* of *Halicarnassus*, and more conformable to SCRIPTURE. And the Scriptural dynasty of the *Assyrian* kings is explained and adjusted to that of the *Babylonian* kings, by means of *Ptolomy's* Canon; while the erroneous supposition is exposed, of a double capture of *Nineveh*, unskilfully adopted from *Ctesias*, by modern Chronologers, *Petavius*, *Usher*, &c.

The *Chaldean*, or *Babylonian Chronology*, which follows the *Assyrian* in the order of time, is here rectified, by a careful comparison of the varying accounts of Sacred and Profane History, now attempted to be reconciled and adjusted to each other, chiefly by the help of *Ptolomy's* Canon; in which a slight error, of two years in defect, in the short reigns of *Ilverodamus* and *Nericassolassar*, or the *Evilmerodach* and *Belshazzar* of Scripture, is compensated by an equal and opposite error of two years in excess, committed in the reign of *Cyrus*: and by this simple rectification of the Canon, joined to that fortunate discovery of *Jackson*, that the death of *Belshazzar* preceded the capture of *Babylon*, by *Cyrus*, no less than seventeen years, this perplexed

and intricate period is, he trusts, more clearly explained, and upon surer grounds, than has been hitherto effected.

In the *Median* and *Persian Chronology*, which follows next in order, the transition of empire from the *Medes* to the *Persians*, is shewn, not, according to the relation of *Herodotus*, by the dethronement of *Astyages*, by his grandson, *Cyrus* the Great, but by peaceable inheritance; the crown naturally descending from *Cyaxares*, the son and successor of *Astyages*, who is called "*Darius* the *Mede*," by Scripture, in defect of issue male, to his nephew and son-in-law, *Cyrus*; and this, he trusts, is satisfactorily proved from the joint testimony of *Daniel*, *Æschylus*, and *Xenophon*; and the intricate and perplexed *Median* Chronology of *Herodotus*, is also adjusted, by means of the celebrated Eclipse of *Thales*, which now appears to have happened B.C. 603, rather than in any other of the years that have been assigned by Historians and Chronologers.

The birth of *Cyrus*, and his succession to the thrones of *Persia*, *Media*, and *Babylon*, form the leading dates, by reference to which the whole scheme of Sacred and Profane Chronology is regulated. They are here determined from the Chronology of *Eclipses*, and the foregoing rectification of *Ptolomy's* Canon. And the seventy years of the *Babylonian* Captivity, counted from the first invasion of *Nebuchadnezzar*, until the return of the *Jews*, in consequence of the decree of *Cyrus*, after the reduction of *Babylon*, are here determined, he hopes, with a precision that will preclude further controversy on this much contested subject.

In the course of the *Persian*, the *Lydian* Chronology

is introduced, on account of the conquest of the kingdom of *Lydia* by *Cyrus;* and it is here adjusted by means of the Eclipse of *Thales;* an astronomical character of the highest importance indeed, which serves to connect the *Babylonian*, *Median*, *Lydian*, *Scythian*, *Egyptian*, and *Grecian* Chronology.

To the *Persian*, succeeded the *Macedonian*, or *Grecian* dynasty, when Alexander the Great conquered "*Darius* the Persian," or *Codomannus*, at the decisive battle of *Arbela*. The Chronology of this period is of great consequence to the elucidation of *Daniel's* famous prophecy of the *seventy weeks*, by shewing that "the fourth king," from the time of its commencement, who was "far richer" than his predecessors, was no other than the last *Darius*, whose immense wealth, and the spoils taken by *Alexander*, are recorded by the Greek and Latin Historians.

The *Macedo-Grecian* was succeeded, in the east, by the *Parthian*, and by the *Persian* dynasties, in continuation. The two last are usually confounded together, by the *Greek* and *Latin* classic authors, because they equally maintained the balance of power against the formidable *Roman* Empire in the west. Their chronology is extremely embarrassed.

These were succeeded by the *Saracen*, and by the *Turkish* dynasties, in continuation. The rise, conquests, and persecutions of these fierce and bigotted fanatics, under the symbolical representation of *locusts*, during the fifth and sixth trumpets, or first and second woes, are described in the Apocalypse.

The *Egyptian Chronology*, which has been hitherto considered as inexplicable, will here, it is hoped, receive

considerable light from a careful comparison of the original records and fragments still extant; and the *old Egyptian Chronicle*, the mutilated dynasties of *Manetho*, recorded by *Josephus*, *Julius Africanus*, and *Eusebius*; the imperfect list of *Theban*, or *Egyptian* kings, furnished by *Eratosthenes*, and the complete list of *Egyptian* kings formed by *Syncellus*, from documents subsisting in his age, by their combined evidence, have enabled him, he trusts, to fill up, with a considerable degree of probability, the correct, but scanty outline of the *Egyptian* Chronology of *Herodotus*, in perfect conformity with SCRIPTURE; and to detect the falsity of the system ostentatiously obtruded on the world as the genuine system of *Herodotus*, in the voluminous French translation and notes of *Larcher*, whose Canon of *Egyptian* Chronology, he conceives, is equally repugnant to *Herodotus*, to *Egyptian* History, and to HOLY WRIT; furnishing but one correct date from beginning to end; namely, the accession of *Sethon*, Priest of *Vulcan*, B.C. 713.

Such is a brief sketch of a work, the composition of which has engrossed the author's attention for many years; and he now submits it to the Public, with an humble hope, that it will prove not unacceptable to the learned, nor unprofitable to younger students, not only in Sacred, but also in Profane Literature.

PREFACE

TO THE SECOND EDITION.

THE public approbation of this work, evinced by the sale of the first edition, and the encreasing demand for it, have encouraged the Author to prepare a new and more perfect edition; in the first Volume of which, the following alterations, corrections, and improvements have been made.

1. A new arrangement of the branches of *Chronology:* the *Technical* now preceding the *Historical,* in its proper order.

2. In the review of the leading systems of *Historical Chronology,* the *Irish* system of *Gildas Coemhain,* in the year A.D. 1072, nearly agreeing with *Scaliger's,* is introduced; forming an honourable proof of the ancient and scientific literature of *Ireland,* before its connexion with *England.*

3. The *era* of the *Hegira,* or flight of *Mahomet* from *Mecca,* A.D. 622, so useful and necessary in reading the Oriental Historians, is now inserted from *Playfair's Chronology,* with some material corrections, and in an improved form.

4. An amended description of *Paradise,* or the Gar-

den of *Eden,* in which its most probable site is shewn, not to have been in *Babylonia,* as before supposed, but in *Armenia;* somewhere in the vicinity of the present heads or springs of the *Euphrates* and *Tigris.*

5. *Noah's Prophecy* of the fortunes of the three primitive families of his sons, Gen. ix. 20—27, more correctly explained than before, according to the learned Mr. *Faber,* who has ably exposed the insufficiency of the received interpretation.

6. A more critical explanation of that venerable geographical chart of *Moses,* Gen. x. chiefly from *Faber.*

7. The route pursued by the three primitive families, in their migration from the original settlement in *Armenia,* along the course of the *Euphrates,* to *Shinar,* according to Mr. *Penn's* ingenious explanation; and the universal confusion of tongues at *Babel.*

8. A correction and enlargement of the former account of the *Pyramids of Egypt,* collected from the recent discoveries of *Davison, Belzoni, Caviglia,* &c., recorded in the *Quarterly Review,* in which they are proved to have been designed for sepulchral monuments, not water temples consecrated to the *Nile,* as supposed before.

9. To the received accounts of *Jerusalem,* and its environs, from *Sandys, Maundrell,* &c. are now added some interesting *observations* of that universal and intelligent traveller, Dr. *Clarke,* from actual observation, and upon strong historical ground; questioning the validity of the supposed sites of the *Holy Sepulchre,* and of the *Mount of Corruption;* and conjecturing that the tomb of *Joseph* of *Arimathea* is rather to be sought in the sepulchral caves at the base of the latter; which he con-

ceives to be the true Mount *Sion*, from the Greek inscription, ΤΗС ΑΓΙΑС СΙΩΝ, "*Of the Holy Sion*," found thereon. And that Mount *Olivet* is the true Mount of Corruption, whereon *Solomon* built temples to *Baal Peor*, *Moloch*, and *Ashtoreth*, from the curious discovery of a conical cavern on the middle top of the Mount, unnoticed by former travellers.

10. A critical explanation of St. *Paul's voyage* from *Cæsarea* to *Puteoli*, and proof that the island of *Melite*, on which he was shipwrecked, was not the island of *Malta*, as generally supposed, but *Meleda*, in the Adriatic Gulph, from the learned and ingenious *Dissertation* of Dr. *Falconer*, the physician, of *Bath*.

Notwithstanding all the Author's anxiety and assiduity to correct mistakes, and to procure fuller and correcter information; yet, in a work of such variety and compass, he cannot pretend to perfection, nor to guard against those errors and failures, incident to human nature, and to advanced age; in which the wisest are apt to "*slumber* and *sleep*," even in the most important and earnest pursuits, if long protracted.

Quæ parum cavit natura humana,
Aliquando dormitans opere in longo.

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I. ELEMENTS

OF

TECHNICAL CHRONOLOGY.

Χρονος εστιν επανορθωσις πραγματων και τηρησις.

CHRONOLOGY *is the regulation and preservation of facts.*

STOIC.

I. ELEMENTS

OF

TECHNICAL CHRONOLOGY.

CHRONOLOGY in general, or "*the Computation of Times*," (as the original implies) may be divided into two species, *Technical* and *Historical.*

Technical Chronology is the art of computing the several measures of time, natural or instituted, used by historians to record facts, in their *Fasti, Calendars,* or *Chronicles.* And these are, *Days, Weeks, Months, Years, Generations, Reigns, Eclipses, Canons,* and *Cycles.* This species is founded in *Astronomy* and the *course of Nature;* and therefore admits of proof derived from the known laws of motion in the Mundane System, and the doctrine of Probabilities.

Historical Chronology is the art of computing, adjusting, and verifying the whole range of dates furnished by historians, according to certain cardinal *Epochs, Eras,* and *Periods* of time, so as to reduce the whole, *if possible,* to one entire uniform and consistent system; in which sacred and profane history shall be brought to harmonize or correspond with each other.

This is a much more difficult process than the former; because the *data* afforded by sacred and profane history, in general, are frequently obscure, imperfect, mutilated, or corrupted in process of time, or length of ages, either by decay, accident, or design. The restriction, therefore, "if possible," is necessary, because the subject does not admit of rigid demonstration, but only of an approximation to truth, more or less near, according to the nature of the data, the correctness of the principles, and the skill with which they are applied.

Technical Chronology, as forming the basis of *Historical*, requires that its several *Measures of Time* should be previously explained. And a critical explanation of these will contribute much to the right understanding and illustration of sacred and profane classic authors.

Before we consider these *measures*, it will be necessary to explain the various modes of

NUMERATION

used in different nations.

Originally, Numbers were expressed by their names at full length. Thus, the venerable Registry of the Antediluvian Patriarchs, Gen. v. 18, "And *Jared* lived *two* and *sixty* years, and a *hundred* years, and begat *Enoch*: and *Jared* lived after he begat Enoch, *eight hundred* years, and begat sons and daughters: and all the days of *Jared* were *two* and *sixty* years, and *nine hundred* years, and he died." Here, according to the original, the order of Notation is in an ascending series, *Units*, *Tens*, *Hundreds*, &c. contrary to the modern European mode. The same prevailed also among the ancient Greeks; the expedition against *Troy* was undertaken, τρεις και δεκατου ετους, "the *three* and *tenth* year of the reign of *Menestheus*," according to the primitive notation of the *Parian* Chronicle; which was also adopted in our language, "the *thirteenth*," *fourteenth*, &c.

The first numeral characters, or symbols, were the letters of the alphabet, in the order of succession. Thus, the several stanzas of the 119th Psalm, were marked by the Hebrew letters, *Aleph* 1, *Beth* 2, *Gimel* 3, &c. This was probably the most ancient mode.

The first improvement in alphabetical notation, was the *Decimal* division, or arrangement: the first nine letters expressing the digits, 1, 2, 3, &c., the tenth, 10, the eleventh, 20, the twelfth, 30, &c.

The next was raising the value of the numeral letters in a decuple proportion, by accents, or marks, attached to the letters; thus, א̍ denoted 1000; and sometimes the word at length, אלף; the plural אלפים, denoted 2000, ג̍ אלפים, 3000, &c.

This was followed by arbitrary marks, or symbols, for particular numbers, as among the Greeks, ϡ, for 900, &c.

The last and grandest improvement, was the rejection of nu-

NUMERAL CHARACTERS.

30	[illegible]	ל	ࠋ	ܠ	ل	λ	ΔΔΔ.	XXX.
40	[illegible]	מ	ࠌ	ܡ	م	μ	ΔΔΔΔ.	XL.
50	[illegible]	נ	ࠍ	ܢ	ن	ν	𐅄.	L.
60	[illegible]	ס	ࠎ	ܣ	س	ξ	𐅄Δ.	LX.

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NUMERAL CHARACTERS.

900	٩..	ץ	[illegible]	[illegible]	ظ	ϡ	HHHHH. IↃCCCC.	
1000	١...	א	[illegible]	[illegible]	غ	͵α	X.	CIↃ. ∞. M.
2000	٢...	ב	[illegible]	[illegible]	[illegible]	͵β	XX.	IICIↃ. IIM.
3000	٣...	ג	ד	[illegible]	[illegible]	͵γ	XXX.	IIICIↃ. IIIM.

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Pl. III.

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NUMERAL CHARACTERS.

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meral letters, and introduction of specific symbols, in the nine digits, 1, 2, 3, &c.; and the cypher, 0, raising their value in a decuple progression, 10, 100, 1000, &c.

For simplicity, variety, and compass, this surely may rank among the noblest discoveries of human sagacity; if we attribute it thereto, and not rather to THE FATHER OF LIGHTS, the original Author of language, oral and written; from whom ultimately proceed "*every good gift*, and *every perfect grace*." And most justly did *Abulfaragi* eulogize the *Indian* discoverers, as *Fodina Sapientiæ*, "a pit of wisdom!"—How it was possible indeed for the Ancients to carry on such long arithmetical computations, as we find in the *Bible*, *Herodotus*, *Manetho*, *Josephus*, &c., by the help of such awkward, complicated, and embarrassed a mode of Notation as by numeral letters, is not easy to be conceived at the present day by those who are accustomed to the facility and dispatch of the *Indian* symbols. Their arithmetic must necessarily have been a species of *algebraic* calculation, such as we find in the problems of *Diophantus*, about the commencement of the Christian Era; and such as must have been used before him, by *Hipparchus* and *Archimedes*.

The following Table, XXI, exhibits the various numeral characters, and modes of Notation, employed by different nations. It will be found fuller, and more correct, than that of *Beverege*, which he calls *Aurea Tabella*, from its great utility in ancient numeration, p. 279, &c.

I. VULGAR NOTATION.

Of the several columns composing this Table, the first on the left hand represents the usual mode of reckoning, as far as *one hundred thousand;* the succeeding columns represent the *Indian*, which was the parent of our Notation, the *Hebrew*, *Samaritan*, *Syriac*, *Arabic*, the *Greek*, both by small letters and uncials, and the *Roman*. Our digits are evidently derived from the *Indian*, though with considerable variation in some. The *cypher* 0 was an improvement upon the Indian point, as being more conspicuous or legible, which we owe to the *Arabian* Astronomers.

II. INDIAN.

The characters here exhibited are such as occur in the writing of the principal *Geographers*, *Astronomers*, and *Chronologers* of the East. Thus, *Ulug Beg*, that learned *Persian*

prince, who flourished about A. D. 1440, represents the *Greek* Epoch as longer than the Arabian, by ٣٤٠٧٠٠ or 340700 days. See *Beverege* Chron. p. 291.

III. Hebrew. IV. Samaritan.

The Hebrew column is expressed in the Chaldee alphabet, which was introduced after the return of the Jews from the *Babylonish* Captivity, and perhaps by *Ezra* the Scribe. The primitive *Hebrew* character, such as it appears on ancient *shekels*, differed considerably from the *Chaldee;* and was the prototype, evidently, of the rude *Samaritan* character, which it greatly surpassed in symmetry and elegance. See the collection of *sacred shekels*, in the *Apparatus* prefixed to the first volume of the London *Polyglott Bible*, that noblest specimen of the *Typographic* art, as well as the most useful; p. 38.

In the primitive Hebrew notation, *Iod* י denoted 10; whence by composition, יא 10 + 1 = 11, יב 10 + 2 = 12, &c. Instead of יה, 10 + 5 = 15, the *Jews*, to avoid profaning the sacred name IAH, substituted טו, 9 + 6 = 15. Here was a remarkable deviation from the most ancient mode, corresponding to our's, of placing the number 10 before the digits; and the same prevails in the higher numbers, קא 100 + 1 = 101; קב, 102, &c. תא, 401, תב, 402, &c. תק 400 + 100 =500; תת 400 + 400 = 800; תתק 400 + 400 + 100 = 900.

The *Jews* afterwards expressed the five centenary numbers after 400 by the five final letters of the Chaldee alphabet, *Caph* ך, 500; *Mem* ם, 600, &c.

To express thousands, the letters begin again, either with marks over them, or their value determined by their place in the decimal progression: as, אתל, 1000 + 400 + 30 = 1430; הדמב, 5000 + 400 + 40 + 2 = 5442.

V. Syriac.

The *Syriac* alphabet, agreeing with the *Hebrew* and *Samaritan*, in the number and order of its letters, the mode of notation is the same, with some slight variations. Thus, 1. The number 15, is expressed by the numerals 10 and 5; because the Hebrew name of God, IAH, was not used in Syriac. 2. The number 20, is expressed by a double *Caph*, the initial and final; yet so as that the final Caph is removed in the succeeding 21, 22, &c. and the proper literal digit is substituted. The same redu-

plication prevails in the number 50 and 70, 500 and 700. The value of the digits is also raised, in the decimal scale, by a point over the letter, raising the tens to hundreds; and the hundreds to thousands, by a point under the letter. Myriads, by a horizontal stroke under the letter.

VI. ARABIC.

The Arabic alphabet at present in use, differs widely from the primitive Arabic, or *Cufic* alphabet, in the number and order of its letters. The change was made by *Ibn Mocla,* in the tenth century.

The *Cufic* corresponded with the *Syriac,* from which it was evidently derived. The present alphabet is miserably deranged, both in the number and order of the letters, several new ones being added thereto; while the old ones, notwithstanding their dislocation, retain their primitive values in the *Syriac* or *Hebrew* alphabet, thus incontestibly demonstrating their common descent from the primæval alphabet; as will appear more plainly from their names and powers.

Arabic Numerals.

Alif, 1; *Be,* 2; *Ta,* 400; *Tha,* 500; *Gim,* 3; *Hha,* 8; *Cha,* 600; *Dal,* 4; *Dhsal,* 700; *Re,* 200; *Za,* 7; *Sin,* 60; *Shin,* 300; *Sad,* 90; *Dad,* 800; *Ta,* 9; *Da,* 900; *Ain,* 70; *Gain,* 1000; *Fe,* 80; *Kaf,* 100; *Kef,* 20; *Lam,* 30; *Mim,* 40; *Nun,* 50; *Wau,* 6; *He,* 5; *Ie,* or *Ya,* 10.

Hence it appears, that of these twenty-eight letters, only the two first, corresponding to *Aleph* and *Beth,* retain their proper place and value. The third letter, *Ta,* corresponding to *Thau,* the last of the Hebrew alphabet, still retains its primitive value; while the tenth Hebrew letter, *Iod,* is here thrust down to the last place, in *Ie,* or *Ya,* still retaining its primitive value, 10; and so on of the rest of the primitive letters.

In the column of Arabic numerals, I have only set down the first of the three complicated forms of the Arabic letters, at the beginning, middle, and end of words; but the three forms are used indiscriminately, which tends to create great confusion and embarrassment in their notation; of which *Beverege* furnishes some curious and involved specimens, remarkably resembling the algebraic notation; in one of which, a large number is made up of the following parts: $\overline{400 + 60 + 2} \times 1000 \times 1000$:

$+ \overline{30 + 5} \times 1000 : + 900 + 90 + 6 = 462{,}035{,}996$; as I found out by decyphering the original, p. 326.

VII. VIII. Greek.

The *Greek* alphabet was originally derived from the *Phœnician*, or *Syriac;* and retains the names and powers of the letters, with some slight variation. To preserve the analogy of notation, three additional symbols were introduced, in the seventh column, to supply the place of certain *Syriac* letters wanting in the Greek alphabet. 1. Επισημον Βαυ, "the symbol *Bau*," ϛ, to supply the place of *Vau*, 6. 2. Κοππα, the symbol ϙ, 90, corresponding to the Syriac *Koph*, reversed. 3. Σαν Πι, or the symbol ϡ, 900; derived from the Samaritan *Tsade* reversed; and so denominated, perhaps, from the letter *San*, or *Sigma* reversed, including the letter *Pi*. This former symbol, ϙ, is sometimes represented differently, ϟ, 90.

As far as 100, the Hebrew and Greek letters correspond in their values: above it, the Greek got one step in advance. *Resh* in Hebrew, and *Sigma* in Greek, denote 200.

To denote thousands, &c. the letters recur again, and their values are determined by their place. Thus, ρϟϛ, signifies 196; β ϡ κγ$\frac{\alpha}{\beta}$, 2923$\frac{1}{2}$. The last instance strongly resembles the algebraic notation of fractions.

The eighth column represents the more ancient and simple mode of Notation, by Uncial, or Capital letters; such as is employed in the *Parian Chronicle* Marbles; of which a specimen is given hereafter.

In that Inscription there are only six letters employed, with their combinations.

Ι	= 1.	From the ancient Ις, for ῾Εις, "*one.*"
Π	= 5.	From Πεντε, "*five.*"
Δ	= 10.	From Δεκα, "*ten.*"
Η	= 100.	From the ancient aspirate H, in HEKATON; afterwards written, ῾εκατον, "*a hundred.*"
Χ	= 1000.	From Χιλια, "*a thousand.*"
Μ	= 10000.	From Μυρια, "*ten thousand.*"

The use of the aspirate H, marks the antiquity of the notation. Thus, the most ancient Greeks wrote, PHOME, *Rhome;* but afterwards, when the aspirate letter was abolished, ῾Ρωμη, *Rome;*

substituting the aspirate mark. And in the celebrated *Amyclean* Inscription, supposed to have been written 146 years before the destruction of *Troy*, alternately backwards and forwards, "like the plowing of oxen," (βουστροφηδον) the first word is so written, MHENAΛIA: *Mhenalia.* See *Astle's* Origin *of Writing*, p. 67, and 232, first edit.

That the letter H could not be intended for the Greek *Eta*, as in after times, which *Astle* imagined, writing the word Μηεναλια, is evident from this, that the place of *Eta*, throughout the inscription, is supplied by two *Epsilons;* as in MATEEP, for Ματηρ. The same is observable in the preceding word, PHOME, where the *Omicron* likewise is used for *Omega.*

The figure of this aspirate H, was probably borrowed from the Hebrew aspirate *Hheth*, which, upon ancient shekels, was written ⊟. See the *Apparatus* of the *Polyglott Bible*, cited before. *Astle* has also given a figure of the Greek aspirate in an oblique position, thus, ⟐, which strongly resembles the Hebrew.

To express multiplication by 5, in the *Parian* inscription, the multiplicand is placed in the midst of an imperfect Π. Thus, ΠΔ, 50; ΠH, 500, &c.

IX. Roman.

From the Greek uncial notation, in the eighth column, was derived the *Roman*, but with some variations. Their numeral letters were:

I = 1; V = 5; X = 10; L = 50; C = 100; D = 500; M = 1000; which are not so easily to be explained; the learned being much divided how to account for the numeral powers of V, X, L, and D. The general analogy, however, between both methods, is obvious: thus, the age of Homer, ΠHHΔΔΔΔIII, resembles the Roman arrangement, DCXXXXIII.

Receding, however, from the Greek notation, a larger number is diminished by prefixing a smaller: thus, IV 5−1 = 4; XC, 100−10 = 90; XXC, 100—20 = 80.

The number 500, was originally expressed by placing a C reversed after I, thus: IↃ: which, being written corruptly, was probably changed into D. And, in like manner, the number 1000, anciently written CIↃ, was changed into ∞, and perhaps M.

By annexing more reversed C's, the number 500 was increased tenfold, IↃↃ, 5000; IↃↃↃ, 50,000; which again were doubled, by prefixing as many; CCIↃↃ, 10,000; CCCIↃↃↃ, 100,000.

And to express 300,000, these last characters are thrice repeated by *Cicero*, pro *Roscio*. Pliny relates, that the famous Egyptian labyrinth in the Heroopolitan *nome*, or district, was first made IIIMDC, 3600 years before his time, 36, 13. *Beverege*, by an easy mistake, for *nomo*, substituting *homo*, has transferred it to the creation of the first man. P. 300.

Sometimes the numeral letters are raised to thousands by a horizontal stroke, $\overline{\text{I}}$, 1000; $\overline{\text{V}}$, 5000; $\overline{\text{X}}$, 10,000, &c.

DAYS.

The earliest measure of Time on record, is the *Day*. In that most ancient and venerable account of the Creation, by *Moses*, the process is marked by the operations of each day. The "*evening* and the *morning* were the first *day*," &c. Gen. i. 5. &c.

Here the word "day" denotes the Civil or Calendar day of 24 hours, including "the evening," or natural night, and "the morning," or natural day; while the sun is either below or above the horizon of any place, in the course of the earth's diurnal rotation, between two successive appulses of the same meridian to the sun: corresponding, therefore, to a *solar day* in Astronomy *.

It is remarkable, that the "*evening*," or natural *night*, precedes the "*morning*," or natural *day*, in the *Mosaic* account. Hence the Hebrew compound, ערב־בקר, "*Evening-morning*," is used by the prophet *Daniel*, to denote a civil day, in his famous chronological prophecy of the 2300 days, Dan. viii. 14. And also the Greek compound, *νυχθημερον*, to denote the same. And hence *Hesiod*, the eldest of the Greek poets that have reached us, represents the occultation of the *Pleiades* as lasting *νυκτας τε και ἡματα τεσσαρακοντα*, "forty *nights* and *days*," i. e. calendar days. And following the primæval order, the ancient *Gauls* and *Germans* counted times and seasons by the number of *nights*, not of days; as we learn from *Cæsar* and *Tacitus*: a usage still retained by their descendants; for in old French, *anuit* signifies "to-day;" and in English, *sevennight*, *fortnight*, "seven days," "fourteen days." Thus is sacred history verified by primitive tradition,

* *Naturalis dies* est tempus ab oriente sole ad solis occasum; cujus contrarium tempus est *nox*, ab occasu solis usque ad exortum. *Civilis* autem *dies* vocatur, quod fit uno cœli circumactu, quo dies verus et nox continetur. *Censorinus* de *die nat.* c. 23.

By an apparent incongruity, *Keil*, and other Astronomers, call the time from sun-rise to sun-set, the *artificial* day. Lect. 28.

handed down to the present times; "the *night seeming to usher in the day* *."

The natural day consisted of twelve hours, which are variable in all places but the equator, according to the seasons of the year; and equal, or of the mean length, only at the vernal and autumnal equinoxes: being longer in the summer half-year, and shorter in the winter. "*Are there not twelve hours in the day?*" saith our Lord, appealing to this ancient and long-established division, as a matter of public notoriety. John ix. 11. And among the Heathen nations, the same division prevailed. "What!" said *M. Crassus* to king *Deiotarus*, "What do you mean? *Your twelfth hour is now at hand,* and are you proceeding to build a city?"

The *first hour* of the day began at *sun-rise;* the *sixth hour* ended at *mid-day*, or *noon;* the *seventh* hour began at *noon;* and the *twelfth* ended at *sun-set.* In like manner, the *first* hour of the night began at *sun-set;* the *sixth* ended at *midnight;* and the *twelfth* ended at *sun-rise.*

Thus *Pliny* recommended, that apples, in autumn, should not be gathered *ante horam primam*, "before the *end* of the first hour;" or till they have had an hour's sun upon them, to dry up the dew. Nat. Hist. xv. 18.

He also says, speaking of a place under the tropic of *Cancer*, on the day of the *summer solstice*, *sextâ horâ*, umbræ in totum absumuntur, "at the *sixth hour* the shadows totally vanish;" for the sun being then vertical, in the meridian, objects cast no shadows. Nat. Hist. vi. 34.

And so, *Macrobius* remarks, that the *civil* day of the *Romans*, *a sexta noctis hora oriri*, "began from the *sixth hour* of the night," or from midnight. Saturnal. l. 3.

Prudentius reckoned that at the *ninth hour*, three quarters of the day were elapsed, and only one quarter remained.

> *Nona* submissum rotat *hora* solem,
> *Partibus* vix dum *tribus* evolutis;
> *Quarta* devexo superest in axe,
> *Portio lucis.*—*Hymn* VIII. p. 34. Ed. Elzevir.

In the parable of the labourers hired to work in the vineyard, the last, hired "at the *eleventh* hour," worked only "*one hour,*" till "*the evening,*" or sun-set, when they were paid their wages.

* Nec *dierum* numerum ut nos, sed *noctium* computant; sic constituunt, sic condicunt: *Nox ducere diem videtur.*—*Tacitus*, Germ. 11.

Matt. xx. 1—12. They worked therefore during the *twelfth* hour.

That the *twelfth* hour ended at sun-set, we learn from a law of *Solon:* ὁ ἥλιος επι των ορων, εσχατη ὥρα εστω. "Let the sun, setting upon the mountains, be the *last hour:*" and this was copied in the laws of the twelve tables at *Rome*, "*Solis occasus suprema tempestas esto.*"

These instances (chiefly selected from Dr. *Townson's* works, vol. I. 263—269) are decisive to prove that the Ancients cited hours from their *endings*, rather than their beginnings; which *Townson* has not sufficiently marked, in the ambiguous phrase, "the *first* hour of the day *was* an hour after the sun rose; and the *twelfth was* when it set." Vol. i. p. 233. And this is the usage of the Moderns also. "At *one* of the clock," signifies an hour after mid-day, or midnight, &c. or at the *end* of the first hour after, &c. For removing this ambiguity, I am indebted to Archdeacon *Churton's* valuable communications.

The *last hour* of the day is denoted by a peculiar phrase, Luke xxiii. 54. Και ἡμερα ην παρασκευη, και σαββατον επεφωσκε. The rescinded translation: "*And it was preparation day* [*Friday*] *and the sabbath was going to dawn;*" i. e. at the *dawn of night*, or *evening twilight*, p. 113, was founded on *West's* erroneous account of the limits of the sabbath day, "from the first appearance of the *stars* on *Friday*, to their reappearance on *Saturday:*" Resurrection, p. 85, which is unsupported by *Jewish* authorities, and contrary to the law,—"from *evening* unto *evening* ye shall hallow your *sabbath*," Levit. xxiii. 32. The true spirit indeed of επεφωσκε is given in our public translation, "*drew on*," or approached; but the same literal expression, in the same sense, is found in a *Syriac* quotation, of *Asseman's Bibliotheca Orientalis*, tom. i. p. 213, "On *the Sabbath*, at the *eleventh* hour, as the first day of the week *was beginning to shine;*" here the *eleventh* hour corresponds to our fifth hour after noon, when the last hour began; or as paraphrased by *Asseman*, *Sabbato exeunte*, *Dominicâ ineunte*, "as *Saturday* was ending, and *Sunday* beginning." Here the Chaldee and Syriac verb, *nahar*, *illuxit*, properly denotes the morning twilight, or "*break of day*," 2 Sam. ii. 32; but is transferred to the moon at full, rising a little before sun-set, in consequence of the refractive power of the atmosphere, which elevates the luminaries above the horizon; so that the moon sometimes appears to

rise in the East, before the sun sets in the West. But the moon was then actually about the full, namely, on the day of the crucifixion. This application of the verb, επεφωσκε, (which is the exact rendering of *nahar*) to "the *full moon, shining** with superior splendour, in the serene and warm climates of *Syria* and *Palestine* †, entirely removes the impropriety of the former rendering; and by a usual *Syriasm*, not more just than beautiful, correctly expresses the time, when "the *moon*," that rules the *night*, "was *beginning to shine*," shortly before sun-set, or commencement of the sabbath-day.

The natural day was at first divided into three parts, *Morning*, *Noon*, and *Evening*. *David* mentions these as hours or times of prayer. Ps. lv. 17. And *Homer* notices them also: Ηως, η Δειλη, η μεσον ἡμαρ, "*morning*, or *evening*, or *mid-day*." Iliad 21. 111.

The natural night also was originally divided into three parts, or watches: Ps. lxiii. 6; and xc. 4. The *first*, or *beginning of watches*, is mentioned Lament. ii. 19; the *middle watch*, Judg. vii. 19; and the *morning watch*, Exod. xiv. 24. And to these *Homer* seems to allude:

> Αστρα δε δη προβεβηκε, παρῳχηκεν δε πλεων νυξ,
> Των δυο μοιραων, τριτατη δ' ετι μοιρα λελειπται.

"The stars are now far advanced, and more than *two parts of the night* are passed: a *third part* only is still left."

Herodotus also mentions the *second watch* of the night, IX. 50; as does *Livy*, VII. 35; with this observation, that it was the fittest for surprizing the enemy in their camp, "*when oppressed with the deepest sleep* ‡." And *Xenophon* mentions the

* *Lucentemque globum Lunæ.*—Virgil.

† The *luminousness* of a nocturnal sky in the *West Indies*, during the *vernal* season, is thus described in glowing colours, by the eloquent *Edwards*.

"The nights at *this season*, are transcendently beautiful. The clearness of the heavens, the serenity of the air, and the soft tranquillity in which Nature reposes, contribute to harmonize the mind, and produce the most calm and delightful sensations. The *moon* too, in these climates, displays far greater radiance than in *Europe*; the smallest print is legible by her light. And in the moon's absence, her function is not ill supplied by the brightness of the *milky way*, and by that glorious planet *Venus*, which here appears like a little moon, and glitters with so refulgent a lustre, as to cast a shade from trees, buildings, and other objects; making full amends for the short stay and abrupt departure of the *crepusculum*, or twilight"—in the torrid zone near the equator.

N. B. *Venus*, "the evening star," who is also *Lucifer*, "the morning star," becomes the harbinger either of night or of day, when the sun is depressed only *ten* degrees below the western, or eastern horizon, respectively.

‡ Quod tempus mortales *somno altissimo premit*.

last watch, (or the *third,* according to *Hutchinson,)* which he thus accurately describes, Anab. IV. p. 250.

"But when it was about the *last watch,* and there remained only so much of the night as would enable them to cross the plain *in the dusk* *, then rising according to orders, they set out and arrived at the mountain along with the day."

Afterwards, the strictness of military discipline among the *Greeks* and *Romans,* introduced an additional night-watch. Thus *Arrian* mentions an attack made by the Barbarians on *Alexander's* camp, "when it was now about the *fourth watch,*" v. 24, 2. The Romans also copied it; and from them the *Jews* in our Saviour's time. The *second* and *third* watches are mentioned Luke xii. 38; and the *fourth* watch of the night, Matt. xiv. 25; and the four are mentioned together, by our Lord, and described by the terms, Οψε, "*the late* watch," μεσονυκτιον, "*the midnight,*" αλεκτοροφωνιας, "*the cock-crowing,*" and πρωι, "*the early.*" Mark xiii. 35. A double *cock-crowing,* indeed, is noticed by *Mark,* xiv. 30, where the other Evangelists mention only a single cock-crowing; Matt. xxvi. 34; Luke xxii. 34; John xiii. 38. But this is easily reconciled; the second, or principal, was that which they meant: thus *Juvenal* notices the second:

> Quod tamen ad *Galli cantum* facit ille *secundi,*
> Proximus *ante diem* caupo sciet. Sat. 9.

Which also was meant by *Horace:*

> Sub *Galli cantum* consultor ubi ostia pulsat. Sat. 1.

The precise beginning and ending of each of the four watches, is thus determined.

1. Οψε, "the *late,*" began at sun-set, and ended with the third hour of the night, including the evening dawn, or twilight. It was also called οψια ὡρα, *even-tide,* Mark xi. 11; or simply οψια, *evening,* John xx. 19, &c.

2. Μεσονυκτιον, "*the midnight,*" lasted from the third hour till midnight.

3. Αλεκτοροφωνιας, "*the cock crowing,*" lasted from midnight till the third hour after, or the ninth hour of the night. It included the two cock-crowings, with the second, or principal of which, it ended.

* *Suidas* renders σκοταιους, the word here used, by ετι σκοτιας ουσης, "while it was still *dusk;*" as the phrase should be rendered, John xx. 1.

4. Πρωι, "*the early*," lasted from the ninth to the twelfth hour of the night, or sun-rise, including the morning dawn, or twilight. It was also called πρωια, *morning*, or *morning-tide*; ὡρα being understood. John xviii. 28, &c *.

The *Jews* reckoned two evenings: the former began at the ninth hour of the natural day, or third after noon; the latter began at sun-set, and was called ἑσπερα, *evening*, Acts iv. 3. The former, προς ἑσπεραν, "*towards evening*," Luke xxiv. 29. The same usage prevailed among the *Greeks*. Thus *Xenophon* calls the former evening, Δειλη; and the latter, Οψε. Compare Anab. p. 75 and 126, Hutchinson.

The phrase οψιας γενομενης, "*when it was evening*," sometimes ambiguously expressed both evenings, as in *Matthew's* account of the signal miracle of the loaves and fishes. Where the former was meant, when the miracle began, Matt. xiv. 15, as determined by *Luke*, ἡμερα ηρξατο κλινειν, "*the day* (or *sun*) *began to decline*," ix. 12. The latter evening was meant, when our Lord dismissed the multitude, Matt. xiv. 23; as ascertained by *John*, explaining the equivalent phrase, ὡς δε οψια εγενετο, "*when it was evening*," by the subsequent circumstance, in the next verse, και σκοτια ηδη εγεγονει, "*And it had been already dusk*." John vi. 16, 17.

By the Law of *Moses*, the Paschal Lamb was required to be sacrificed בין הערבים, "*Between the evenings*," Exod. xii. 6; Numb. ix. 3; and elsewhere. "*At even, at the going down of the sun*," including both, Deut. xvi. 6. And *Josephus* has well explained it, Θυουσι μεν, απο εννατης ὡρας ἑως ἑνδεκατης, "The *Jews* sacrifice [the passover] *from the ninth hour until the eleventh*." Bell. Jud. 6, 9, 3, p. 1291. "CHRIST, *our Passover*," therefore critically fulfilled the Law, when he expired about the *ninth hour*, Matt. xxvii. 46, and was taken down from the cross, at the *first evening*, Mark xv. 42—45, and was interred before the *second evening*, or *sun-set*, Luke xxiii. 54. For so it behoved Him "to fulfil *all righteousness*," *ceremonial* as well as *moral!*

The inconveniences resulting from a variable beginning of the civil day, earlier or later, according to the different seasons of

* Among the *Romans*, a public officer called *Accensus*, or Crier, used to proclaim the *third* hour, *noon*, and the *ninth* hour, as we learn from *Varro:* and still, the *Mahometan Imans*, or priests, proclaim *day-break*, *noon*, the *first evening*, *twilight*, and *cock-crowing*, from the minarets of their mosques.

the year, induced several ancient nations, the *Egyptians*, (according to *Pliny*, Nat. Hist. lib. ii. c. 77.) the *Ausonians*, the most ancient inhabitants of *Italy*, the Roman Pontifices, *Hipparchus*, the Grecian astronomer, and the *Chinese* astronomers of *Cathai* and *Oighur*, &c. to reckon their civil day from midnight to midnight, as from a fixed, invariable point; and this usage has been adopted by most of the modern nations of Europe.

The morning twilight, day-break, or *dawn*, is described with still greater variety of expression, but with a propriety and consistency not usually noticed, and totally lost in our public translation, by the four evangelists; in their accounts of the departure of the *Galilæan* women from their respective habitations, in order to visit the holy sepulchre on *Easter* day, that auspicious day of our Lord's "rising," or resurrection, (as the *Saxon* word implies) which was called a "*high day*" in the Jewish ritual, (John xix. 31.) as being the second or principal day of the *Paschal* week, on which the *wave sheaf*, or first-fruits of the *barley* harvest was offered, Levit. xxiii. 10, 11; whence our Lord himself was figuratively styled "*the first-fruits*" of the spiritual harvest of the resurrection, 1 Cor. xv. 20. In opposition, perhaps, to this truly "*high day*" in a double sense, the first Sunday after Easter is styled in our almanacks, *Low Sunday*.

1. *Matthew* represents the time of the women's departure, *Οψε σαββατων, τῃ επιφωσκουσῃ εις μιαν σαββατων.* "*Late after the Sabbath, at the dawning* on the first day of the week." Matt. xxviii. 1.

Οψε σαββατων is a phrase signifying "a good while after the sabbath-day had expired, at the evening twilight, on our Saturday;" i. e. when the natural night was now far advanced. *Philostratus* uses the same phrase, Οψε Τρωικων, to denote, "*Long after the Trojan* [*times*.]" This was necessary, to appropriate the ensuing dawn to the *morning*, rather than to the evening. Luke xxiii. 54.—*Τῃ επιφωσκουσῃ*, "*at the dawning;*" here the expression is elliptical, put for *συν τῃ ἑω επιφωσκουσῃ*, "*along with the dawning morn;*" corresponding to *ὑπαυγαζουσης ἑω, ὑποφαινουσης ἑω, ὑπο πρωτην ἑω*, &c.

> *Ημος δ' ουτ' αρ' πω ἠως, ετι δ' αμφιλυκη νυξ.*
> "When it was not yet *morn*, but *still twilight night*."
> Iliad, VII. 433.

2. *Mark* expresses it differently:

Διαγενομενου σαββατου, λιαν πρωι της μιας σαββατων.

"*After the sabbath-day was thoroughly past, very early* on the first day of the week." Mark xvi. 1, 2.

Here the phrase, διαγενομενου σαββατου, is explanatory of *Matthew's* οψε σαββατων; the particle δια, in composition, being *intensive*, or heightening the signification of the simple verb γινομαι, as in διαγινωσκω, "*to know thoroughly.*" Acts xxiii. 15. Πρωι included the whole time of "the *early* watch;" and to mark the *dawn*, Mark adds λιαν, "*very,*" which is put elliptically for εννυχον λιαν, by Mark himself, i. 35, "*very far in the night.*"

3. *John* expresses the precise time of the πρωι, or "*early* watch," differently from *Mark:*

Τῃ μιᾳ των σαββατων, πρωι, σκοτιας ετι ουσης. "On the first day of the week, *early, while it was still dusk,*" John xx. 1. This is a more definite expression than Mark's. Σκοτια should not be rendered "*dark,*" as in our translation, which is rather the rendering of σκοτος, of which σκοτια is a diminutive. The whole phrase corresponds to *Homer's*

> Πρωι, ὑπ' ηοι, οἱ συν τευχεσι θωρηχθεντες.
>
> "*Early, about morn,* they, armed with their weapons."

where ὑπ' ηοι seems to be a contraction of ὑποφωσκουσης ἑω, *sublucente Aurora,* as more fully expressed by *Aristotle,* ὑποφωσκουσης ἑω, και ηδη πρωι, "While *morn was dawning from beneath,* and it was now *early.*"

4. *Luke* expresses it differently from the rest by an elegant and scientific phrase:

Τῃ μιᾳ των σαββατων, ορθρου βαθεος. "On the first day of the week, while *the rising* [sun] *was deep* [sunk beneath the horizon.]" Luke xxiv. 1.

The morning twilight begins as soon as the sun arrives within 18 degrees below the horizon, for then the smallest stars disappear. This phrase also is used by the best classic writers: *Aristophanes, Thucydides, Aristides,* &c., use it; and *Plato* explains it, Η ου πρωι ετι εστιν; πανυ μεν ουν—ορθρος βαθυς. "Is it not yet *early?*—Surely it is—*the rising* [*sun*] *is deep.*" *Crito,* p. 32 *.

5. The accurate *Mark* alone records the time of the women's

* From this variety of phraseology, yet harmony of time, the reader may judge whether the *Evangelists* were skilled, or not, in the niceties of the *Greek* language, as used by the oldest and purest classic authors.

arrival at the sepulchre, ανατειλαντος του ἡλιου, "*after sunrise.*" Mark xvi. 2. N. B. The verbs expressing their departure are aorists, ηλθον, ελθουσαι, &c. signifying the act of "*going;*" the verbs expressive of arrival are the present tense, ερχεται, intimating the act of "*coming.*" Only one or the other of these acts is expressed by the evangelists, and our public translation has unfortunately confounded them together: Matt. xxviii. 1; Mark xvi. 1; Luke xxiv. 1; and put "*coming*" for "*going.*"

WEEKS.

This primæval measure of time, instituted as a memorial of the work of creation in six days, and of the ensuing *sabbath*, or day of "rest," Gen. ii. 2, 3, was used by the CREATOR himself, in his denunciation of the deluge, Gen. vii. 8. It was twice employed by *Noah* in the ark, Gen. viii. 10—12; and *Jacob's* marriage-feast lasted a *week*, Gen. xxix. 7.

> Τας δ' ἑβδομας, ὁ σεμνος ἑβδομαγετας
> Αναξ Απολλων ειλετ'.
>
> "*The weeks*, the venerable author of the week,
> King *Apollo* appointed." *Æschylus.*

It was therefore universally observed by *Noah's* descendants during the prevalence of the *Patriarchal* religion; but when mankind degenerated, and sunk into *idolatry*, the primitive institution was neglected, and at length lost. And the days of the week were dedicated by the *Egyptians*, *Chaldeans*, *Syrians*, &c. to the heavenly host, the sun, moon, and planets.

Hence the *Israelites*, during their residence in *Egypt*, became infected with the idolatry of the country, and omitted, either voluntarily, or by compulsion, the observance of the *Sabbath*, until it was revived in the desert, sanctioned by the miracle of the *manna*, which was intermitted on the Sabbath-day, and solemnly re-enacted on mount *Sinai*, and made one of the laws of the Decalogue, and its violation punished with death. Exod. xvi. 23—30; xx. 8; Numb. xv. 35. In order that it might be "*a sign* between God and his people," Ezek. xx. 20; and a mark of separation from the idolatrous Gentiles, who universally violated it, as we learn from the following exceptions in a curious passage of *Julian* the apostate:—Ποιον εθνος εστι, προς των θεων, εξω του, "ου προσκυνησεις θεοις ἑτεροις," και του, "μνησθητι των σαββατων," ὁ μη τας αλλας οιεται χρηναι φυλαττειν εντολας;" "What nation is there, by the gods, who do not think,

that except the first commandment, *Thou shalt not worship other gods*, and the fourth, *Remember the Sabbath*, they ought to observe the other commandments of the decalogue?"

The *Egyptians*, we are told by *Dio Cassius*, led the way in consecrating the days of the week to the seven planets, and they were followed by the *Greeks*, *Romans*, *Hindus*, *Goths*, *Germans*, and *Saxons*. And the following *Pythian* oracle, prescribing the worship of these false gods on their respective days, is preserved by *Eusebius*:—

> Κληιζειν 'Ερμην, ηδ' 'Ηελιον κατα ταυτα,
> 'Ημερῃ 'Ηελιου, Μηνην δ' ὁτε της δε παρειη
> 'Ημερη, ηδε Κρονον, ηδ' εξειης Αφροδιτην.

> "Invoke *Mercury*; and the *Sun* in like manner,
> On *Sunday*; and the *Moon*, when her day comes;
> And *Saturn* also; and *Venus*, in succession."

Hence the Gentiles dropped the observance of a seventh day of rest. The Greeks observed the Decads, or tenth days; the *Romans*, *Nundinæ*, the ninth days, &c.

Some astronomers and chronologers have imagined that the *week* was a natural measure of time, furnished by the four principal phases or quarters of the moon, which last each about a week; but it was unquestionably derived from the divine institution at the creation, handed down by primitive tradition. This is evident from the word *Sabbat*, or *Sabbata*, denoting a *week* among the *Syrians*, *Arabians*, Christian *Persians*, and *Ethiopians*; as in the following ancient *Syriac* calendar, expressed in the *Chaldee* alphabet *:—

חד־שבתא	- *One of the Sabbath*, or *Week*	- Sunday.
תרן־שבתא	- *Two of the Sabbath* - - -	- Monday.
תלת־שבתא	- *Three of the Sabbath* - -	- Tuesday.
ארבעא־שבתא	- *Four of the Sabbath* - -	- Wednesday.
חמשא־שבתא	- *Five of the Sabbath* - -	- Thursday.
ער־שבתא	- *Eve of the Sabbath* - - -	- Friday.
שבתא	- *The Sabbath* - - - - - -	- Saturday.

* This calendar is taken from *Michaelis's Introduction to the New Testament*, translated by *Marsh*, Vol. I. p. 136.

The derivation of the *Syriac* numerals from the *Hebrew* is obvious: חד, is from the Hebrew, אחד, *one*, by elision of the first letter; תרן, from the Hebrew, שנים, *two*; by substitution of kindred letters, or letters of the same organ; תלת from שלש, *three*, by the same; ארבעא, from ארבע, *four*, by affixing the emphatic article א; which corresponds to the prefix ה, *the*, in Hebrew; חמשא, from חמש, *five*, by the

The high antiquity of this calendar is evinced by the use of the cardinal numbers, *one*, *two*, *three*, &c. instead of the ordinals, *first*, *second*, *third*, &c. following the Hebrew idiom; as in the account of the creation, where we read in the original, "*One* day," which the Septuagint retains, calling it, *ἡμερα μια*. It is remarkable that all the evangelists follow the *Syriac* calendar, both in the word *σαββατα*, used for "*a week*," and also in retaining the cardinal number *μια σαββατων*, "*one of the week*," to express the day of the resurrection. Matt. xxviii. 1; Mark xvi. 2; Luke xxiv. 1; John xx. 1. Afterwards *Mark* adopts the usual phrase, *πρωτη σαββατου*, "*the first of the week*," Mark xvi. 9; where he uses the singular *σαββατον* for *a week;* and so does *Luke*, as Νηστευω δις του σαββατου, "I fast twice in *the week*." Luke xviii. 12.

The *Syriac* name for Friday, or the sixth day of the week, is also adopted by *Mark*, who renders it *προσαββατον*, "*sabbath-eve*," xv. 42; corresponding to *παρασκευη*, "*preparation-day;*" Matt. xxvii. 62; Mark xv. 42; Luke xxiii. 54; John xix. 31. And *Josephus* also conforms to this usage, except that he uses *σαββατα*, in the singular sense, for the *sabbath-day*, in his account of a decree of *Augustus*, exempting the Jews of *Asia* and *Cyrene* from secular services, *εν σαββασι, η τῃ προ ταυτης παρασκευῃ, απο της ὡρας εννατης*. "On the *sabbath*-day, or *on the preparation*-day before it, from the *ninth hour*." Antiq. 16, 7, 2. The first three evangelists also use the plural *σαββατα*, to denote the sabbath-day; Matt. xii. 5—11; Mark i. 21; and ii. 23; Luke iv. 16, &c. Whereas John, to avoid ambiguity, appropriates the singular *σαββατον* to the *sabbath*-day, and the plural *σαββατα* to *the week;* John v. 9—16; vii. 22, &c. xx. 1.

And here we may incidentally remark, that there is not a more prolific source of confusion and embarrassment in Ancient Chronology, than the substitution of the cardinal numbers, *one*, *two*, *three*, for the ordinals, *first*, *second*, *third*, &c. which frequently occurs in the sacred and profane historians. Thus *Noah* was *six hundred* years old when the deluge began, Gen. vii. 6; and

same; ער, from ערב, *evening*, by elision of the last letter; and שבתא, from השבת, *the sabbath*, or *rest*.

The divinities in the *Saxon* mythology, from which our names of the days of the week are derived, were the *Sun;* the *Moon;* *Tuisco*, a warlike divinity; *Odin*, or *Woden*, who was the same as the *Hermes*, or *Thoth*, of the *Grecians* and *Egyptians*, and the *Budha* of the *Hindus;* *Thor*, the Thunderer, or *Jove;* *Freya*, his wife; and *Sater*, *Saturn*.

presently after, in his *six hundredth* year: confounding complete and current years. And the dispute whether A.D. 1800, or A.D. 1801, was the first of the nineteenth century, should be decided in favour of the latter; the former being in reality the last of the eighteenth century; which is usually, but improperly called, the year *one thousand eight hundred*, complete; whereas it is really the *one thousandth, eight hundredth;* as in Latin, Anno Domini, *Millesimo, Octingentesimo.*

There is also another and a prevailing error, arising from mistranslation of the current phrases, *μεθ' ἡμερας οκτω, μετα τρεις ἡμερας*, &c. usually rendered, "*after eight days,*" "*after three days,*" &c. but which ought to be rendered "*eight days after,*" "*three days after,*" as in other places, *μετα τινας ἡμερας, μετ' ου πολλας ἡμερας*, which are correctly rendered "*some days after,*" "*not many days after,*" in our English Bible, Acts xv. 36; Luke xv. 13, the extreme days being included. Such phrases seem to be elliptical, and the ellipsis is supplied, Luke ix. 28, speaking of our Lord's transfiguration, *μετα τους λογους τουτους, ὡσει ἡμεραι οκτω. After* these sayings, about "*eight days,*" or rather about the *eighth* day, counted inclusively; for in the parallel passages, Matt. xvii. 1; Mark ix. 2; there are only "*six* days," counted exclusively, or omitting the extremes.

Thus, circumcision is prescribed, Gen. xvii. 11, when the child is "*eight* days old;" but in Levit. xxii. 3. "on the *eighth* day." And JESUS accordingly was circumcised, *ὁτε επλησθησαν ἡμεραι οκτω*, "when *eight days were accomplished,*" Luke ii. 21; whereas, *John* the Baptist, *τῃ ογδοῃ ἡμερᾳ*, "on the *eighth* day." And the last, which was the constant usage, explains the meaning of the former.

And this critically reconciles our Lord's resurrection, *μετα τρεις ἡμερας*, "*three days after,*" according to Matt. xxvii. 63; Mark viii. 31; with his resurrection, *τῃ τριτῃ ἡμερᾳ*, "on the *third* day," according to Matt. xvi. 21; Luke ix. 22; and according to fact: for our Lord was crucified on Good Friday, about the *third* hour; and he rose before sunrise, *πρωι, early,* on Sunday; so that the interval, though extending through three calendar days current, did not in reality, amount to two entire days, or forty-eight hours.

This phraseology is frequent among the most correct classic writers: *Josephus* uses the phrase *μετα ετη δυο*, "*two years after.*" Bell. Jud. 1, 13, 1, as equivalent to *δευτερῳ ετει*, "in *the second year,*" relating the same transaction, Ant. 14, 13, 3.

Theophrastus says of the *Egyptian* thorn, ὁταν δε κοπῃ, μετα τριτον ετος, ευθεως αναβεβλαστηκεν, "when it is cut down, it sprouts again *the third year after;*" which *Pliny*, N. H. 13, 9, renders, "cæsa, *anno tertio* resurgit."

Demosthenes uses the phrase μεθ' ἡμερας δυο, in the sense of "*two days after.*" *Mid.*

Cicero also adopts it: speaking to *Antony* of the Ides of March, on which *Cæsar* was assassinated, he says: Neque te *illo die*, neque *postero* vidi—*post diem tertium* veni in Ædem Telluris. "I neither saw you *that day* [the Ides of *March*, in the Senate] nor *the next*, [the 17th before the Calends of *April*] —The *third day after* [the 16th before the Calends of April] I came into the temple of *Tellus*." Philippic. 2, 35.

Some learned Commentators, *Beza*, *Grotius*, *Campbell*, *Newcome*, render such phrases, "*within eight days*," "*within three days;*" which certainly conveys the meaning, but not the literal translation, of the preposition μετα, "*after*."

In memory of the primæval week of Creation, revived among the Jews, after their departure from *Egypt*, their principal festivals, the *Passover*, *Pentecost*, and *Tabernacles*, lasted a week each. And it is remarkable, that from the earliest times, sacrifices were offered by *sevens*. Thus, in the patriarch *Job's* days, "*seven bullocks* and *seven rams* were offered up for a burnt offering" of atonement, by the Divine command. Job xlii. 8.—The *Chaldean* diviner, *Balaam*, built *seven* altars, and prepared *seven bullocks* and *seven rams*. Numb. xxiii. 1. And the *Cumæan* Sibyl, who came from *Chaldea*, or *Babylonia*, gives the same directions to *Æneas*, that *Balaam* did to *Balak*:

> Nunc grege de intacto, *septem mactare juvencos*
> Præstiterit, *totidem* lectas, de more, *bidentes*.
>
> "It will be better now to *sacrifice seven bullocks*,
> And *seven sheep*, culled from the spotless herd,
> According to custom." Æn. vi. 38.

And when the Ark was brought home by *David*, the Levites offered *seven bullocks* and *seven rams*. 1 Chron. xv. 26. And hence we may account for the peculiar sanctity of the seventh day, among the older Heathen writers, even after the institution of the Sabbath fell into disuse, and was lost among them. Thus *Hesiod* styles it: Ἑβδομη, ἱερον ἡμαρ, "*the seventh, a holy day.*" And *Theophilus*, Bishop of *Antioch*, speaking of the seventh day, says, ἡν παντες ονομαζουσι. "*Which all name*," or distinguish: "*but most*," adds he, "*are ignorant of the reason why.*"

Instead of *Saturday*, the last day of the week, and the patriarchal and Jewish *sabbath*, the Christian world has adopted *Sunday*, the first day of the week, in memory of the *new creation*, or resurrection of OUR LORD JESUS CHRIST, in a glorified body, on that day; which was also the day on which he made his successive manifestations of himself to his disciples after his resurrection, and the day of the *first-fruits* of the Christian Church on *Whitsunday*, thence consecrated to religious worship, and called *the Lord's day* in the Apostolic age; Acts ii. 41; xx. 7; 1 Cor. x. 16; xi. 20; xvi. 2; Rev. i. 10; consequently, the change must have been sanctioned and authorized by HIM, who was "LORD *even of the Sabbath.*"

Deviating from the usage of both *Jews* and *Christians*, *Mahomet* instituted *Friday* as "the day of the assembly" for public worship, either in memory of his first entry into *Medina* on that day, or because on *Friday* God finished the work of creation, as the Mahometan doctors allege; *Sale's Koran*, chap. LXII. p. 451; or, rather, the artful policy of the Arabian impostor retained the ancient idolatrous usage of his countrymen the *Arabs*, who worshipped the planet *Venus*, which they called *Chobar*, on that day.

MONTHS.

The *Month* is a measure of time originally derived from the *Moon*, Ecclus. xliii. 8., in almost every nation and language. Among the *Hebrews*, ירח, *Iarah*, signified both the *moon* at full, and the *month;* compare Job xxxi. 26. with xxix. 2. חדש, *Hhadash*, the *moon* at new, and the *month;* compare Numb. x. 10; Psal. lxxxi. 3. with 1 Sam. xx. 5; Ezek. xlvi. 1; Numb. xxviii. 11, &c. Among the Greeks, Μην, the *month*, is evidently related to Μηνη, the *moon;* and from Μηνη, according to *Varro* and *Macrobius*, was derived the Latin *Mensis*, a month. In like manner, the Saxon *Monat*, and our *Month*, are evidently derived from the *Moon.*

The Civil, or Calendar *month*, originally consisted of 30 days; in which time a lunation was supposed to be finished. Thus, during the deluge, *Noah* counted five months equivalent to 150 days, at 30 days to one month. And such was its fixed length among the *Babylonians*, *Egyptians*, *Persians*, and *Grecians*. Hence *Hesiod* called the last day of the month τριηκαδα, "the *thirtieth;*" and so did the astronomer *Thales;* and his contemporary, *Cleobulus*, another of the seven sages, put forth a riddle,

representing the year as divided into twelve months, of thirty days and nights each.

> Εἱς ὁ πατηρ· παιδες δε δυωδεκα· τῳ δε ἑκαστῳ
> Παιδες τριηκοντα, διανδιχα ειδος εχουσαι·
> Αἱ μεν λευκαι εασιν ιδειν, αἱ δ' αυτε μελαιναι·
> Αθανατοι δε τε ουσαι, αποφθινυθουσιν ἑκαστοι.

> "The *father* is one; the *sons*, twelve; to each belong
> Thirty *daughters;* half of them *white*, the other, *black:*
> And though immortal, yet they perish all."

And *Tatius*, in his commentary on *Aratus*, reckoned that the full moon fell on the fifteenth day, or middle of the month. *Geminus* also, that great astronomer, about B. C. 240, assigns, as a "proof that the *Greeks* counted the days accurately according to the moon's age, that *solar* eclipses happen on the thirtieth day, when the moon is in conjunction with the sun, and both in the same part of the heavens: and *lunar* eclipses, on the night, tending to the middle of the month." See the Original, Petav. Vol. III. p. 19.

These instances are sufficient to shew the prevailing opinion among the ancients, that a *lunation*, or *synodical* month, lasted thirty days.

But, afterwards, it was found, by more accurate observations, that the length of a lunation was only 29½ days. Whence the thirtieth day, which *Hesiod* called ενη, "*old*," was named by *Solon*, ενη και νεα, "*old and new;*" one half of it pertaining to the old month, the other half to the new; and to avoid the fraction, they counted the months alternately, 29 and 30 days.

The months originally had no appropriate names, but were distinguished by their order of succession; the *first* month, the *second* month, &c.: a custom which is still preserved among the *Chinese* and *Japanese*. But in process of time, the months, like the days of the week, came to be designated by the names of tutelar gods, heroes, characters of the seasons, or other local circumstances of different countries, to the great confusion and embarrassment of ancient calendars, when compared together.

The following Table will furnish a comparative view of the correspondences of the months of the principal ancient nations, reduced as nearly as may be to the common standard of the *Julian* year. Assuming the vernal equinox to have happened on March 25, it includes the most eventful period of Grecian History, from the invasion of *Xerxes*, to the conquest of Persia, by *Alexander* the Great.

TABLE I.—ANCIENT MONTHS.

JULIAN.	1. HEBREW.	2. SYRIAN.	3. ATTIC.	4. MACEDON.	5. SYRO-MACED.	6. ROMAN.	7. EGYPTIAN.	8. PERSIAN.	9. ARABIAN.	10. PAPHIAN.	11. HINDU.
March 25.	1. *Abib*, or *Nisan*.	*Nisan*.	Munychion.	Artemisius.	Xanthicus.	*Martius*.	Pharmathi.	Aban.	Mucharram.	Autocratoricus.	Aswin.
April 25.	2. *Zif*, or *Iar*.	*Aiar*.	Thargelion.	Dæsius.	Artemisius.	Aprilis.	Pachon.	Adar.	Saphar.	Demachexarsius.	Cartic.
May 25.	3. *Sivan*.	*Haziran*.	Skirrophorion.	Panemus.	Dæsius.	Maius.	Pauni.	Di.	Rabia I.	Plethutatos.	Agrahayan.
June 25.	4. *Thamuz*.	*Tamuz*.	Hecatombæon.	Lous.	Panemus.	Junius.	Epiphi.	Behman.	Rabia II.	Archiereus.	Paush.
July 25.	5. *Ab*.	*Ab*.	Metageitnion.	Gorpiæus.	Lous.	Quintilis, seu Julius.	Mesori.	Espendar.	Jomada I.	Esthius.	Magh.
August 25.	6. *Ælul*.	*Ailul*.	Bœdromion.	Hyperberetæus.	Gorpiæus.	Sextilis, seu Augustus.	Thoth.	Fervardin.	Jomada II.	Romæus.	Phalgun.
Sept. 25.	7. *Ethanim*, or *Tisri*.	*Teshrin* I.	Mæmakterion.	Dius.	Hyperberetæus.	September.	Paophi.	Ardabahesht.	Rajab.	Aphrodisius.	Chaitr.
Oct. 25.	8. *Bul*, or *Marheshvan*.	*Teshrin* II.	Pyanepsion.	Apellæus.	Dius.	October.	Athyr.	Chordad.	Shaaban.	Apogonicus.	Vaisach.
Nov. 25.	9. *Chisleu*.	*Cainun* I.	Posideon.	Audynæus.	Apellæus.	November.	Choiak.	Tir.	Ramadan.	Ænicus.	Jaishth.
Dec. 25.	10. *Tebeth*.	*Cainun* II.	Gamelion.	Peritius.	Audynæus.	December.	Tybi.	Mordad.	Shawal.	Iulus.	Ashar.
Jan. 25.	11. *Shebet*.	*Shebet*.	Anthesterion.	Dystrus.	Peritius.	Januarius.	Mechir.	Sharivar.	Dulkaadah.	Cæsarius.	Sravan.
Feb. 25.	12. *Adar*.	*Adar*.	Elaphebolion.	Xanthicus.	Dystrus.	Februarius.	Phamenoth.	Mahr.	Dulhiggiah.	Augustus.	Bhadr.

I. Hebrew Months.

The Hebrew months were originally distinguished by their numeral order: thus, the Deluge began in the *second* month, and came to its height in the *seventh* month, at the end of 150 days, Gen. vii. 11—24; viii. 4; and decreased until the *tenth* month, when the tops of the mountains were seen, viii. 5.

Afterwards they acquired distinct names: thus, *Moses* named the *first* month of the year *Abib*, Exod. xii. 2; xiii. 4.; signifying "*Green*," from the green ears of corn at that season; for it began about the vernal equinox. The second month was named *Zif*, signifying in Chaldee, "*Glory*," or "*Splendour;*" in which the foundation of *Solomon's* temple was laid, 1 Kings vi. 1. The seventh month was styled *Ethanim*, which is interpreted "*Harvests*," by the Syriac version, 1 Kings viii. 2. The eighth month, *Bul;* from "*the fall*" of the leaf, 1 Kings viii. 2.

Besides these names, given before the *Babylonian* Captivity, there were others after. The first month was also called *Nisan*, signifying "*flight;*" because in that month the *Israelites* were thrust out of Egypt, Ex. xii. 39. The third month, *Sivan*, signifying, "*a bramble*," Esth. iii. 7; Nehem. ii. 1. The sixth month, *Ælul*, signifying "*mourning;*" probably because it was the time of preparation for the great day of atonement, on the tenth day of the seventh month, Neh. vi. 15. The ninth month was called *Chisleu*, signifying "*chilled;*" when the cold weather sets in, and fires are lighted, Zech. vii. 1; Jer. xxxvi. 22. The tenth month was called *Tebeth*, signifying "*miry*," Esth. ii. 16. The eleventh, *Shebet*, signifying a "*staff*," or a "*sceptre*," Zech. i. 7. And the twelfth, *Adar*, signifying a "*magnificent mantle*," probably from the profusion of flowers and plants with which the earth then begins to be cloathed in warm climates, Ezra vi. 15; Esther iii. 7. It is said to be a *Syriac* term, 2 Mac. xvi. 36.

II. Syrian Months.

These are the same as the Hebrew, and nearly agreed in their names, after the Babylonian Captivity.

III. Attic Months.

It is of great importance to the right understanding of the

classic authors, *Herodotus, Thucydides, Demosthenes, Diodorus Siculus, Plutarch, Xenophon, Arrian*, &c. to determine the true order of the *Attic* months, and their relation to the *Julian*, and to the seasons of the year: and the more so, because the schemes of *Gaza, Scaliger*, and *Potter*, are incorrect. The rectified order of *Petavius* *, which he verified from the first classical authorities, and *Beveridge* and *Spanheim* adopted, is given in Table I.

The first month of the Attic year was called *Hecatombæon*, from the "*Hecatombs*," or multitude of sacrifices then offered. It began about the summer solstice, according to *Aristotle*, *Theophrastus*, and *Dionysius Hal.* The third month, *Boedromion*, or "the Auxiliary," from the victory of *Theseus* over the *Amazons*, at that season, was about the autumnal equinox; for *Plutarch* relates, that there was an eclipse of the moon on the 15th of *Boedromion*, eleven days before the famous battle of *Arbela*. But this eclipse happened, by calculation, Sept. 20, B.C. 331, afternoon, 10 hours, total. And *Ptolomy* relates, that according to an astronomical observation of *Timochares*, the new moon of *Anthesterion* was on the 22d of January, in the 47th year of the first Calippic period. But *Suidas* says, that *Anthesterion* was the eighth month, and derives it from ανθος, "*a flower*:" it corresponded, therefore, in part with the Hebrew

* The only difference between the lists of *Scaliger* and *Petavius*, is in the months *Mæmacterion* and *Pyanepsion*; which the former transposes; and this, on the authority of *Plutarch* in *Demosthenes*, who reckons the three months, *Metageitnion, Boedromion, Pyanepsion*, in succession. And it also must be acknowledged, that at the end of *Ptolomy's Magn. Construc. Selden* found a MS. table of Attic months, exactly the same as *Scaliger's*. See *Selden*, Tom. 2. p. 1489.

But, on the other hand, *Petavius* remarks, that *Aristotle*, in two places of his History of Animals, reckons *Boedromion* and *Mæmacterion* in immediate succession; and proves, that *Mæmacterion* began about the autumnal equinox; and, 2. that although *Plutarch* reckoned *Pyanepsion* after *Boedromion*, yet it was not immediately after; for that there was a month between them, namely, *Mæmacterion*. This may be collected from the context: for *Plutarch* states, that "the affairs of Greece *soon* went to ruin: they lost the battle of Crano in the month *Metageitnion*; a Macedonian Garrison entered Munychia in *Boedromion*; and *Demosthenes* lost his life in *Pyanepsion*." But between the last two events intervened the return of *Antipater* and *Craterus* to Athens; the flight of *Demosthenes* and his party before their arrival; the pursuit of the exiles; the apprehension and execution of *Hyperides, Aristonicus*, and *Himeræus*; and the detection of *Demosthenes* in the sanctuary of *Neptune* in *Calauria*; all which might well have occupied the intermediate month *Mæmacterion*.

See *Petav*. Vol. I. Lib. 1. Cap. 9, 10, 11. p. 12—15.
Bevereg. Lib. 1. Cap. 13.
Spanheim. Chron. Sacr. p. 41.

month *Adar;* of whose name it seems to have been a translation. And these three months determine the whole series.

The Attic month was divided into three decads; the days of the first two decads were reckoned progressively, πρωτη ἱσταμενου, "*first of the beginning,*" δευτερα ἱσταμενου, "*second of the beginning,*" &c. πρωτη μεσουντος, "*first of the middle,*" δευτερα μεσουντος, "*second of the middle,*" &c.; but by a singular variation, introduced by *Solon,* the days of the last decad were counted in a retrograde order from the end of the month, the 21st being called δεκατη φθινοντος, "*tenth of the waning;*" εννατη φθινοντος, "*ninth of the waning,*" &c.: and this mode was adopted also in the *Roman* and *Arabian* calendars.

IV. Macedonian Months.

V. Syro-Macedonian Months.

These two differ only in the anticipation of a month, earlier in the former than in the latter. The cause of it, we are told by *Plutarch,* in his life of *Alexander,* was this: When that prince was going to attack the *Persians* at the river *Granicus,* he was warned that it was unlawful for the *Macedonians* to make war in the month *Dæsius.* In order, therefore, to remove the scruples of his army, with that presence of mind for which he was so remarkable, he immediately ordered that the preceding month, *Artemisius,* should be repeated, and substituted for *Dæsius;* and that *Dæsius* should be postponed till the following month. And in compliment to the Macedonian conqueror, this new order was adopted after the battle of *Arbela,* which decided the fate of the Persian empire.

This change, however, not being universally adopted, was productive of confusion; some reckoning by the new order, others adhering to the old. Thus *Plutarch* makes the month *Lous,* correspond to the Attic *Hecatombæon;* retaining the old; and also *Galen, Ptolomy,* &c. Whereas *Josephus* refers the same month, *Lous,* to the fifth Hebrew month *Ab,* which corresponds to *Metageitnion,* the month after *Hecatombæon:* and he uniformly adheres to the *Syro-Macedonian* months throughout his works*; and is followed by *Eusebius, Epiphanius, Evagrius, Bede,* and the ecclesiastical writers in general.

* *Josephus* reckons that *Xanthicus* corresponded to the first Hebrew month, *Nisan.* Ant. 1, 3, 3, &c.

VI. Roman Months.

In the time of *Romulus*, there were ten months with names, and two without names, in the *Roman* Calendar; of which the first was *Martius*, in honour of the god *Mars*, beginning about the vernal equinox. His successor, *Numa*, named the two intercalary anonymous months, *Januarius*, in honour of *Janus*, the god of time, which he made the first of the year, beginning about the winter solstice; and the second, *Februarius*, from *februo*, to purify; because in that month purifications of the people, and lustrations, were customary.

It is remarkable that the *Roman* Calendar retained the primæval names of the months, longer than any of the Oriental nations, except the *Chinese: Quintilis, Sextilis, September, October, November, December;* denoting their numeral places reckoned from the vernal equinox, as in the *Hebrew*.

The Roman Month was divided into three unequal parts, the first days of which were called *Calends*, *Nones*, and *Ides*. The *Calends* were so called from καλεω, because the appearance of the new moon was then "*called*," or proclaimed, by the public crier, on the first day of the month. The *Nones* were the "*ninth*" day from the *Ides;* which were so called from ειδος, the "appearance" of the full moon. In the four months of *March, May, July*, and *October*, the *Nones* fell on the seventh day of the month, and consequently the *Ides* on the fifteenth; but in the

Artemisius, to the second, *Iar*. Ant. 8, 3, 1.
Lous, to the fifth, *Ab*. Compare Bell. Jud. 6, 3, 5. with Ant. 10, 8, 5; Jer. lii. 12.
Gorpiæus, to the sixth, *Ælul*. Bell. Jud. 6, 8, 4.
Hyperberetæus, to the seventh, *Tisri*. Ant. 8, 4, 1.
Dius, to the eighth, *Marheshvan*. Ant. 1, 3, 3.
Appellæus, to the ninth, *Chasleu*, or *Chisleu*. Ant. 11, 5, 4; 12, 7, 6.
Dystrus, to the last, *Adar*. Ant. 4, 8, 49.

And the venerable *Bede* thus reduces the *Syro-Macedonian* months, to the *Julian;* with a slight corruption of their names:

> "Vocatur autem apud eos, ipse December *Apileos*,
> Januarius *Exdynius*, Februarius *Perithius*,
> Martius *Distrius*, Aprilis *Xanthicus*, Maius
> *Artemiseas*, Junius *Deseos*, Julius *Panemos*,
> Augustus *Loos*, September *Gorpieos*,
> October *Hyperberetæos*, November *Dios*."

This passage, taken from a very ancient MS. of *Bede's* works, in the *Cotton* library, rectifies a gross adulteration of his printed text, Cap. 12, in the list there given.
See *Selden*, Tom. 2. p. 1489.

rest of the months, the *Nones* fell on the fifth, and consequently the *Ides* on the thirteenth.

All the days of the Roman Month were counted in a retrograde order, according to their distance from the ensuing division: thus, the second of *January* was the fourth of, or before, the *Nones;* but the second of *March*, the sixth before the *Nones;* the fourteenth of *January* was the nineteenth before the Calends of *February;* but the fourteenth of *March*, the day before the *Ides*. But from the sixteenth, to the end, the reckoning was the same in all: thus, the twenty-fifth in every month, was the eighth of the Calends of the ensuing month.

VII. Egyptian Months.

The first month in the Egyptian Calendar, *Thoth*, was consecrated to the *Dog-star*, and it began with the *dog-days*, at the Heliacal rising of *Canicula*, about the summer solstice. According to *Josephus*, *Pharmuthi* corresponded to *Nisan*, Ant. 2, 14, 6; and according to *Eutychius*, at the time of the deluge, *Thoth* corresponded to the sixth Hebrew month, *Ælul*. Annal. p. 40.

VIII. Persian Months.

The *Persian* months were originally the same as the *Egyptian;* and the first month, *Fervardin*, corresponded to the Egyptian *Thoth*.

IX. Arabian Months.

The *Arabian* months seem to have originally corresponded to the *Hebrew;* and the first, *Muharram*, to have begun about the vernal equinox: for the first, *Muharram*, and the seventh, *Rajab*, were counted sacred, as among the Hebrews; and the latter was set apart by the Pagan Arabs, before *Mahomet*, for their solemn fast; like the Hebrew *Tisri*, on the tenth of which, was the great day of atonement. But *Mahomet* transferred the fast from the seventh, to the ninth month, *Ramadan;* which had been formerly devoted to eating and drinking to excess; like the Roman *December*. See *Sale's Koran*, Prelim. Disc. p. 148.

X. Paphian Months.

The *Paphian*, or *Cyprian* months, corresponded to the *Macedonian*, and *Syro-Macedonian;* and the month *Dius*, of the former, *Hyperberetæus*, of the latter, and Paphian *Aphrodisius*,

began at the autumnal equinox. According to *Epiphanius*, "CHRIST was baptized on the 16th of *Apogonicus*, among the *Paphians*, six days before the Ides of *November*." But, at Christ's birth, the autumnal equinox happened about Sept. 24, when the 16th of *Apogonicus* was the eighth of November, or the sixth of the Ides. *Bevereg.* Lib. I. cap. 13. p. 83.

XI. HINDU MONTHS.

The riddle of *Cleobulus*, noticed in the *Attic* month, is to be found in the emblematical astronomy of the *Hindus*. According to which, the god *Soma*, or *Lunus*, married twelve celestial nymphs, presiding over the constellations of the Zodiac; on whom he begot twelve *Genii*, or months, who were named after their respective mothers. The thirty *Tithis*, or days of the month, are represented as so many beautiful nymphs. On the *Maha Cala*, or day of the conjunction, they perform obsequies to the *Pitris*, or ancient "fathers" of mankind; to whom the darker fortnight is dedicated. See *Asiat. Researches*, Vol. II. p. 227—295; Vol. III. p. 522.

YEARS.

The primitive sacred year originally consisted of twelve months of 30 days each, or 360 days. This was in use before the deluge; as appears from *Noah's* reckoning five months, or 150 days, from the seventeenth day of the second month, to the seventeenth day of the seventh month; as expressing the time of the rising of the waters; and seven months and ten days more, till the waters were dried up, and *Noah* and his family left the ark, after a residence therein of 370 days, or a year and ten days, till the seven-and-twentieth day of the second month of the ensuing year. Gen. vii. and viii.

This was also the original *Chaldean* year; for *Berosus*, in his History of the Antediluvian Kings of *Babylonia*, counted their reigns by *Sari*, or decads of years; and a *Sarus*, as *Alexander Polyhistor* related (apud *Syncell.* p. 32.) was 3600 days; or ten years, consisting each of 360 days.

After the deluge, this primitive form was handed down by *Noah* and his descendants, to the *Chaldeans*, *Egyptians*, *Phœnicians*, *Persians*, *Greeks*, *Romans*, *Indians*, and *Chinese;* as is evident from the testimonies of the best and most ancient writers and historians.

Diodorus Siculus relates, that at the sepulchre of *Osiris*, the Egyptian priests appointed to bewail his death, filled 360 milk-bowls every day, to denote the number of days in the primitive *Egyptian* year, used in his reign. And he represents an ancient custom at *Acanthe*, near *Memphis*, on the Libyan side of the *Nile*, for 360 priests to fetch water every day from the *Nile*, and pour it into a vessel full of holes, to represent the 360 days in continual flux, or succession. Diod. Lib. I. p. 26, 109.

The *Egyptians* attributed the invention of their year to the Phœnician *Taaut*, *Thoth*, or *Hermes*, the son of *Misraim*, who went with the first colony into *Egypt*, in the reign of *Uranus*, who lived in *Phœnicia*, soon after the dispersion, and was a great astronomer, or a diligent observer of the risings and settings of the stars; who discovered the year from the motion of the sun, and the months from the course of the moon, and was deified after his death. Diod. Lib. III.

Diodorus Siculus, *Plutarch*, and *Q. Curtius*, relate that the *Persian* kings had 360 concubines, one for each day of the year; who went each in their turns to the king *in the evening, and returned in the morning into the house of the women;* as we learn from Herod. Lib. III. 69; and from Scripture, Esth. ii. 12—15.

Harpocration, *Suidas*, and *Julius Pollux* relate, that in the original constitution of *Athens*, the people were divided into four *tribes*, representing the four seasons of the year; and these tribes into twelve *wards*, corresponding to the twelve months; and each ward consisted of thirty *families*, answering to the thirty days of each month; in all 360, as many as the days of the year. *Suidas*, voce Γεννηταί et Γεννῆται. This year, therefore, was introduced into *Greece* many ages before the arrival of *Cecrops* in *Attica*, from *Sais* in *Egypt;* probably by the first settlers, the *Javanians*, or descendants of *Japheth*; or by the old *Pelasgi*, from *Phœnicia*.

The first *Latin* and *Roman* year consisted of 360 days, as we learn from *Plutarch;* who says, in his life of *Numa*, that "in the reign of *Romulus*, the months were very irregular, some not being reckoned *twenty* days, others had *thirty-five* days, and others, more: the *Latins* not then understanding the difference between the *solar* and *lunar* year; but only providing for this one point, that the year should contain 360 days."

The *Chinese* year originally consisted of 360 days; as did

also the *Mexican*, which they divided into eighteen months of 20 days each. Scaliger de emend. temp. p. 225.

From this detail, it is evident that the primitive year every where throughout the ancient world, consisted only of 360 days, for many ages after the deluge.

II. The beginning of the year was various among different nations: the ancient *Chaldeans*, *Babylonians*, *Medes*, *Persians*, *Armenians*, and *Syrians*, began their year about the vernal equinox; and the *Chinese* in the East, and *Latins* and *Romans* in the West, originally followed the same usage. The *Egyptians*, and from them the *Jews*, began their Civil year about the autumnal equinox. The *Athenians* and *Greeks* in general began theirs about the summer solstice; and the *Chinese*, and the *Romans* after *Numa's* correction, about the winter solstice.

At which of these, the primæval year, instituted at the Creation, began, has been long contested among Astronomers and Chronologers. *Philo*, *Eusebius*, *Cyril*, *Augustine*, *Abulfaragi*, *Kepler*, *Capellus*, *Simpson*, *Lange*, and *Jackson*, contend for the vernal equinox; and *Josephus*, *Scaliger*, *Petavius*, *Usher*, *Bedford*, *Kennedy*, &c. for the autumnal. The weight of ancient authorities, and also of arguments, seems to preponderate in favour of the former opinion.

1. All the ancient nations, except the *Egyptians*, began their Civil year about the vernal equinox: but the deviation of the *Egyptians* from the general usage, may easily be accounted for, from a local circumstance peculiar to their country; namely, that the annual inundation of the *Nile* rises to its greatest height at the autumnal equinox. According to *Herodotus*, B. 2, 19. "The *Nile* begins to increase about the summer solstice, and continues to rise for a hundred days; and then decreases for the same time, and continues low all the winter, until the return of the summer solstice." *Diodorus*, B. 1, 3. says, "Its inundation begins at the summer solstice, and increases till the autumnal equinox."—And this is confirmed by the reports of modern travellers: According to *Pococke*, Vol. i. p. 256, the river began to increase at *Cairo*, in 1714, June 30; in 1715, July 1; in 1738, June 20; "And so precisely is the stupendous operation of its inundation calculated," says *Bruce*, Vol. iv. p. 359, "that on the 25th of September, only three days after the autumnal equinox, the *Nile* is generally found at *Cairo*, to be at its highest; and begins to diminish every day after."—*Moses*, therefore, by bring-

ing back the Sacred or Ecclesiastical year to the vernal equinox, while the *Israelites* still retained the Egyptian Civil year, which began at the autumnal equinox, only retrieved the primæval year, as well as the primæval Sabbath; which had been both disused and lost among the *Israelites* during their *Egyptian* bondage.

2. *Josephus*, the only ancient authority of any weight, on the other side, seems to be inconsistent with himself, in supposing that the deluge began in the second civil month, *Dius*, or *Marheshvan*, rather than in the second sacred month; Ant. 1, 2, 3. Because *Moses*, throughout the Pentateuch, uniformly adopts the sacred year; and fixed its first month by an indelible and unequivocal character, calling it *Abib*, as ushering in the season of "*green*" corn. And as *Josephus* calls the second month elsewhere *Artemisius*, or *Iar*, in conformity with Scripture, there is no reason why he should deviate from the same usage in the case of the deluge.

3. To the authority of *Josephus*, we may oppose that of the great Jewish antiquary, *Philo*, in the generation before him; who thus beautifully accounts for the institution of the sacred year by *Moses*. De Septenar. et Fest. p. 1190.

"This month, *Abib*, being the seventh in number and order according to the sun's course [or civil year, reckoned from the autumnal equinox] is virtually the first, and is therefore called "the first month," in the sacred books. And the reason, I think, is this: because *the vernal equinox is the image and representative of the original epoch of the creation of the world.* Thereby God notified the *Spring*, in which all things bloom and blossom, to be an annual memorial of the world's creation. Wherefore this month is properly called the first in the Law, *as being the image of the first original month*, stampt upon it, as it were, by that archetypal seal."

4. *Virgil* also, that profound Antiquary, gives some powerful physical arguments in favour of the creation of the world in *Spring*: Georg. 2, 332.

> "Inque *novos soles* audent se germina tutò
> Credere, &c.

> "The springing *grass* to trust *this season* dares,
> No tender *vine* the gathering tempest fears,
> By the bleak *North*, or roaring *Southwind* roll'd;
> But spreads her leaves, and bids her germs unfold.

Such were the days, the seasons were the same,
When first arose this world's all-beauteous frame;
The sky was cloudless, balmy was the air,
And *Spring's* mild influence made young Nature fair;
And *Cattle* first o'er new-born pastures spread,
And *Man*, an iron race, uprear'd his hardy head;
When *Beasts* through pathless brakes began to prowl,
And glittering *Stars* through heaven's blue concave roll.
Nor could this *infant world* sustain the extremes
Of piercing *Winter*, and the *dog-days'* beams,
Did not kind HEAVEN, the fierce excess between,
Bid gentler *Spring's* soft season intervene."

PITT.

5. The first sacrifice on record seems to decide the question. The time of the sacrifice of *Cain* and *Abel*, evidently appears to have been *Spring;* when *Cain*, who was a "tiller of the ground," brought the first fruits of his tillage, or a sheaf of new corn; and *Abel*, who was "a feeder of sheep," "the firstlings of his flock," lambs: and this was done מקץ ימים, "*at the end of days*," or "*at the end of the year;*" which is the correct meaning of the phrase*; and not the indefinite expression, "*in process of time*," as in our public translation of Gen. iv. 3. It is a remarkable proof of the accuracy of *Moses*, and a confirmation of this explanation, that he expresses the end of the *civil* year, or "*ingathering* of the harvest," by different phrases, בצאת השנה "*at the going out of the year*," Exod. xxiii. 16; and תקופות השנה

* The word ימים, "*days*," is frequently rendered "*a year*," or "*years*," in the sense of שנה, *a year;* signifying an *annual* system of days. Thus, "*David* abode in the country of the Philistines *a year* and four months." 1 Sam. xxvii. 7; where our translation renders it "a *full* year and four months." Again, "at the end of two *years*, *Pharaoh* dreamed, &c." Gen. xli. 1; where our translation renders, "at the end of two *full* years."—"*Elkanah* went up out of his city to sacrifice unto THE LORD in *Shiloh*, ימים בימים, "*year by year*," or "*yearly*," as our translation renders the phrase. 1 Sam. i. 3. And he did so, שנה בשנה, "*year by year*." 1 Sam. i. 7. Whence, זבח ימים, is justly rendered, "*the yearly sacrifice*." 1 Sam. ii. 19. And the phrase in question is more fully expressed and explained by מקץ ימים לימים, "*from year's end to year's* [*end*]," or "*at every year's end*," as it is rendered in our translation. 2 Sam. xiv. 26.

And this will enable us to correct some passages of our public translation. The same phrase should be rendered, "And it came to pass, *at the end of the year*, that the brook dried up," because it ceased to rain in *Spring*. 1 Kings xvii. 7. The phrase ימים אחרים should be rendered "*one year*," Gen. xxvii. 44; xxix. 20; instead of "*a few days*." And the phrase ימים או עשור should be rendered "*a year*, or ten [*months*]." Gen. xxiv. 55. For surely it would be idle in *Rebecca's* friends to ask a respite for her departure to *Canaan* with *Abraham's* steward, for "a *few* days, at the least ten," with our translation.

"*at the revolution of the year,*" Exod. xxxiv. 22; as those phrases may more critically be rendered.

III. But in process of time, it was found that the primæval year of 360 days was shorter than the tropical year; and the first discovery was, that it was deficient five entire days, which therefore it was necessary to intercalate, in order to keep up the correspondence of the civil year to the stated seasons of the principal festivals.

How early this discovery and intercalation was made is no where recorded. It might have been known and practised before the deluge. The apocryphal book of *Enoch,* which probably was as old as the Septuagint translation of the Pentateuch, stated that "the archangel *Ariel,* president of the stars, discovered the nature of the month and of the year to *Enoch,* in the 165th year of his age, and year of the world 1286." And it is remarkable, that *Enoch's* age at his translation, 365 years, expressed the number of entire days in a tropical year.

This knowledge might have been handed down to *Noah* and his descendants; and that it was early communicated indeed to the primitive *Egyptians, Chaldeans,* and *Chinese,* we learn from ancient tradition.

1. *Plutarch* de Isid. et Osir. p. 355, states, from an old mythological tradition among the Egyptians, that the five supernumerary days of the year were discovered by the second *Hermes,* the secretary and chief counsellor of *Osiris,* or *Menes,* the first king of Egypt, whose reign, according to the ensuing rectification of Egyptian Chronology, commenced about B.C. 2412; and that these days were dedicated to *Osiris* himself, *Isis,* his wife, *Horus,* or *Apollo,* his son, *Typhon,* his brother, and *Nephthe,* or *Venus.* And *Syncellus,* Chronograph. p. 123, further relates, that these five days were inserted in the Egyptian Calendar during the reign of *Assis,* or *Asith,* the last of the Shepherd kings, which began about B.C. 1948. *Herodotus* also ascribes this discovery to the Egyptians, and says, that "by inserting them at the end of their civil year of 360 days, they rendered the revolution of time equable and constant;" B. 2. or brought their Civil year to correspond with the Solar or Tropical. And *Diodorus Siculus* mentions an ancient king, *Osymandes,* in whose magnificent sepulchre at *Thebes* there was a circle of gold, a cubit thick, [or rather, broad] and 365 cubits in circumference, which was divided into so many parts, or compartments, representing the

days of the year; and in each division was marked the Heliacal risings and settings of the stars, and the astrological observations deduced from them. This circle, or zodiac, is reported to have remained till the conquest of Egypt by *Cambyses*, who carried it away to Persia. From the whole of this description of the sepulchre, in *Diodorus*, taken from *Hecatæus*, who wrote an Egyptian history about B. C. 300, *Jackson* has abundantly proved, that it could have belonged to no other than the famous *Sesostris*, under the title of *Osymandes*, who began to reign about B.C. 1308. See *Jackson*, vol. ii. p. 396—402.

2. The most ancient and authentic of the Chinese annals, *Xu-kim*, relates, that the emperor *Yao*, or *Yau*, in the 70th year of his reign, B.C. 2269, by the assistance of two skilful astronomers, *Hi* and *Ho*, reformed the Chinese Calendar, and adjusted the lunar to the solar year of 365 days, by the intercalation of seven months in the course of 19 years. *Jackson*, vol. ii. p. 66.

3. These *Egyptian* and *Chinese* accounts tend strongly to corroborate the *Babylonian* or *Chaldean* astronomical observations of the risings and settings of the stars, reaching back from *Alexander's* capture of Babylon, B.C. 330, for 1903 years, which were sent to *Aristotle* by his relation *Callisthenes*, who attended *Alexander* on that expedition, according to *Porphyry*. This series of observations, therefore, began B.C. 2233, about the accession of *Belus* II. who repaired the primitive tower of Babel, and built an observatory thereon. It therefore is more than probable, that the length of the solar year, 365 entire days, was known so early, at least, to the *Chaldeans*, if it did not originate from them to the neighbouring nations.

And this is confirmed by two remarkable circumstances: 1. That the five supernumerary days were intercalated alike by the *Chaldeans*, *Medes*, *Persians*, *Egyptians*, *Grecians*, *Romans*, and even *Mexicans*, at the end of their civil year; and 2. That they were celebrated among all these nations with great mirth and feasting. Such were the Σακεα, or Σακεαι ἡμεραι, among the *Babylonians*, or "*days of ebriety*," from the Persic *Sakia*, "compotatio," or the Hebrew *Sakah*, "bibit," during which, according to sacred and profane history, *Babylon* was surprised and taken by *Cyrus*, as foretold by *Jeremiah*, xxv. 26; li. 39—57; and recorded by *Herodotus*, B. 1; and *Xenophon*, Cyropæd. B. 7. These circumstances evidently indicate a common origin.

4. From the *Chaldeans* and *Egyptians*, the knowledge of the

five supernumerary days of the primitive year, we may presume, was early propagated among the *Hebrews* and *Israelites*. *Abraham* was reckoned a skilful astronomer by *Berosus:* and he visited *Egypt* about 29 years before the reign of *Assis*, when these five days were inserted in the *Egyptian* Calendar, and might therefore have imparted this discovery to the Egyptians, or learned it from them. And *Moses*, afterwards, "who was learned in all the wisdom of the *Egyptians*," (Acts vii. 22.) we may be assured, was not deficient in this respect. Indeed, his reformation of the calendar, and revival of the sacred year, which began about the vernal equinox; the institution of the anniversary feast of the passover, by a perpetual law, to be celebrated "on the 14th day of the first month, at even," or about the full moon, which fell *upon*, or *next after*, the day of the vernal equinox, Exod. xii. 6—27, required no superficial knowledge of the revolutions of the sun and moon.

IV. By repeated observations, it was at length found, that the solar or tropical year exceeded 365 days by about six hours, or quarter of a day. The Egyptian priests of *Thebes* claimed the merit of this further discovery also, according to *Diodorus*, and even so early as the time of the second *Hermes*, according to *Strabo*. Still, however, they never introduced this fractional excess into their civil year, because they held all intercalations to be unlucky; and their priests were bound by oath not to intercalate either *month* or *day* which they might change into a festival.

Hence this redundancy was confined to the priests and to the astronomers among the Egyptians, nor was it communicated to the Greeks until long after its discovery. *Herodotus*, who travelled into Egypt, was ignorant of it. *Plato* and *Eudoxus*, who resided a long time there, afterwards learned it, as a great mystery, from the priests of *Heliopolis* and *Memphis*, and imported it into Greece, and thereby introduced the intercalation of an entire day every fourth year, when the *Olympic* games were celebrated.

The astronomical skill of the ancient Egyptians appears conspicuously in their celebrated cycle of 25 years, for adjusting the lunar and solar motions together, accommodated to their civil year of 365 days; which was more exact than the cycle of 19 years accommodated to the Julian year of 365¼ days. For 25 Egyptian years contain 9125 days, which exceed 309 luna-

tions, amounting to 9124 days, 22 hours, 50 minutes, and 50 seconds, according to *Mayer's* tables*, by only 1 hour, 9 min. 10 sec.; whereas, 19 Julian years, containing 6939 days, 14 hours, 30 min. 3 sec. fall short of 235 lunations, amounting to 6939 days, 16 hours, 31 min. 16 sec. by 2 hours, 1 min. 13 sec. This cycle of 25 years they represented in their symbolical manner, by the fourth part of their *aroura*, a measure of ground containing 100 cubits square, according to the Egyptian grammarian *Horapollo*, who flourished about A.D. 380.

Their next and most celebrated cycle for adjusting the civil year to the solar, was the *Sothiacal* or *Canicular* period of 1460 solar years, equal to 1461 Egyptian. For since the deficiency of the Egyptian year of 365 days was one day every 4 years, so in $4 \times 365 = 1460$ years, it would amount to an entire year. Consequently, in the course of this period, the beginning of the Egyptian year, or the first day of the first month *Thoth*, shifted its place backwards through all the seasons, until it came round again to the same place. And to this probably the Egyptian priests mysteriously alluded, when they told *Herodotus*, "that from the reign of their first king *Menes*, to *Sethon*, priest of Vulcan, the sun had four times altered his course; that *it had twice risen where it now sets, and had twice set where it now rises*, and this without producing any change in Egypt; that the productions of the earth had been the same, and that there had not been more disease or mortality than usual. *Herodot.* B. ii. 142. But according to the ensuing rectification of Egyptian chronology, *Menes* began to reign about B.C. 2412, and *Sethon*, B.C. 713. The interval, therefore, of 1700 years included more than the *Sothiacal* period, and therefore, in the course of it, the sun rose twice, and set twice, in the same degrees of the ecliptic. Thus the relation of the priests was strictly conformable to astronomy, a mere natural occurrence, as they justly represented it, and neither a "*falsehood*," a "*dream*," nor a "*fable*," as it has been idly taxed even by chronologers †.

The *Sothiacal* period was so denominated from *Sothis*, the Egyptian name of the Dog-star, and was supposed to have com-

* See Tables V. VI.

† *Scaliger* thus reprobates it: "Missa igitur illa *mendacia* et *somnia* Ægyptiorum faciamus." De emend. Temp. p. 198. *Stillingfleet*:—"That Egyptian *fable* in Herodotus," &c. Orig. Sacr. p. 90. And *Larcher*:—"Quant à moi, je les regarde comme une *fable grossiere*, imaginée par des gens *fort ignorans*." Herodot. tom. ii. p. 56. Not. Edit. 1.

menced when its Heliacal rising coincided with the summer solstice. The learned *Censorinus* says, that the year A.D. 238, in which he wrote his book *De die natali*, was the hundredth year of the current period; which began, therefore, A.D. 138, and consequently the preceding period; 1460—A.D. 138=B.C. 1322. But in this year the Dog-star rose heliacally on the 20th of July, according to *Censorinus* and *Petavius;* and this was also the solstitial day, according to *Petavius;* or rather the 22d of July, taking into computation the precession of the equinoxes, according to *Jackson;* so that both very nearly coincided. See *Jackson*, Vol. ii. p. 7, 75.

It is a curious circumstance, that the Egyptian *Sothiacal* period, and the Chaldean *Nabonassarian*, both consisting of 1460 years of 365 days, though they differed in the precise time of their introduction, critically synchronized in the beginnings of their correspondent years. For the Era of *Nabonassar*, beginning with his reign at Babylon, Feb. 26, B.C. 747, was the 120th year of the Period, which commenced 30 days earlier, March 28, B.C. 867, when the new moon fell on the day of the vernal equinox *. But the same year B.C. 747, was the 576th year of the *Sothiacal* period, commencing July 20, B.C. 1322, or 1323; during which interval, the *Thoth*, or beginning of the year, had regraded 144 days, (at the rate of a day in every four years) which, counted backwards from July 20, fell on Feb. 26, B.C. 747, also. This indisputably proves a common origin of the *Chaldean* and *Egyptian* astronomy. See *Jackson*, Vol. ii. p. 76.

There is also a remarkable analogy in the construction of those vast astronomical cycles, on which the *Chaldeans*, *Hindus*, and *Egyptians*, founded their pretensions to an antiquity far beyond the creation of the world, as warranted by the most sober and correct records of sacred and profane history, and which evidently were computed backwards, at later periods, from existing *data* or elements.

1. A *Chaldean* period of 432,000 years is mentioned by *Syncellus*, p. 30, as including the reigns of their first kings; and this is also supposed to be the length of the *Cali yuga*, or last of the four Indian ages of the world, beginning with the deluge, B. C. 3102, according to the Brahmins of *Hindustan*. But this period is evidently produced by the multiplication of the two fac-

* See the succeeding article of the *Era of Nabonassar*.

tors, 18 and 24,000, into each other; of which 18 was the Chaldean *Saros*, or *Plinian* period of the lunar inequalities, which is performed in 18 years and 11 days, or 223 lunations; and was much esteemed for its accuracy in computing the returns of eclipses, and other phænomena of the moon's motion. See *Costard's* Astronomy, p. 94. And the other factor was the *annus magnus*, or grand revolution of the orb or sphere of the fixed stars, in the course of 24,000 years, occasioned by the precession of the equinoxes, at the Hindu rate of 54 seconds of the ecliptic annually *; which differs surprisingly little from 50⅓ seconds, the annual rate of the precession, as determined by the nicest observations and most accurate calculations of modern astronomy, in its present high state of improvement. This cycle, therefore, of 432,000 years, must have been invented since the days of *Hipparchus*, who first found out the precession of the equinoxes, about B.C. 128, and probably since the Christian era. And the year of the *Cali yuga*, B. C. 3102, was a remarkable astronomical epoch, when the mean motion of Jupiter was slowest, according to *La Place*, in his *Méchanique Celeste*, tom. 3. Another remarkable epoch in the Hindu astronomy is the year A.D. 1491, when the mean motion of Saturn was the most rapid, according to the same profound astronomer.

2. *Cicero* reprobates the foolish and arrogant pretensions of the *Chaldeans* to a series of recorded observations of the stars for 470,000 years, in round numbers. *Diodorus* is more particular, and raises it to 473,000 years, before *Alexander's* expedition into Asia. The correct number is somewhat more, 473,040 years; the additional 40 years being omitted by *Diodorus*, as insignificant in so great an amount: upon the same principle, that even the 3000 (fortunately preserved by *Diodorus*) were omitted by *Cicero* †. But this correct cycle of 473,040 years was evidently formed by the multiplication of two factors; the square of the Chaldean *Saros*, 18 × 18 = 324 years, and the *Nabonassarean* or *Sothiacal* period of 1460 years. The square of 18 seems to have been employed, in order to furnish a larger period, approximating more nearly to the true lunar motions than

* 360 degrees is equal to 21,600 minutes, or to 1,296,000 seconds; which, divided by 54 seconds, the annual precession, gives 24,000 years as the quotient.

† Thus *Herodotus* states, that the sovereignty of the *Assyrians* in Upper Asia lasted 520 years; but *Diodorus* reckons it 500 years in round numbers, dropping the surplus, as being immaterial in respect of the whole amount.

the *Saros* itself, or rather its deficient value, 18 years, neglecting the 11 days over.

3. The grand Egyptian period of 36,525 years, which was supposed to include the time of the 30 dynasties of Egyptian kings, cited from the *Old Chronicle*, by *Syncellus*, was formed, in like manner, by multiplying their *Sothiacal* period of 1461 years into their lunar cycle of 25 years. It was therefore purely astronomical like the rest.

4. M. *Bailly*, in his sceptical enquiries into the state of ancient astronomy, observed, that several ancient nations, as the *Chaldeans*, *Egyptians*, *Indians*, and *Chinese*, though seated at great distances from each other, possessed several astronomical formulæ common to them all. It appeared, also, that all these people employed these rules and formulæ, handed down to them by tradition, as several of our workmen make use of certain mechanical or geometrical rules, without any knowledge of the principles upon which they were originally constructed.

All these observations tend to justify the opinion of *Herodotus*, " that astronomy, with the gnomon, or sun-dial, and the division of the day into twelve parts, were received by the *Egyptians* from the *Babylonians*." B. 2. And that Babylon was the cradle of arts and sciences, which diverged from thence, in every direction, among the more polished nations of antiquity.

In the reign of *Giemshid*, king of Persia, who was slain by *Dahac*, king of Media, B. C. 703, a simple and ingenious correction of their civil year of 365 days was introduced, to reconcile it, from time to time, with the sun's course. Every 120 years they intercalated an entire month of 30 days, to compensate for the 120 quarter days, omitted in that time; and consequently 12 such months, in a period of $12 \times 120 = 1440$ years. This intercalation remained in use till the time of *Jesdejird*, who was slain, A.D. 632. See *Hyde*, p. 205.

So late as the time of *Herodotus*, the Greeks retained the primitive year of 360 days, and every two years they intercalated a month of 30 days. This only made " confusion worse confounded" in their civil year, which thereby consisted of 375 days, receding still further from the sun's course than the primitive year itself! See the conversation of *Solon* with *Crœsus*, Herod. B. 1.

Waving the successive corrections of the Greek year, in their cycles of four, eight, twelve, and nineteen years, to be learned

from the technical chronologers, *Scaliger*, *Spanheim*, *Beverege*, and *Jackson*, by those who are curious in such matters, I shall close this article with the successive improvements of our calendar year, from its rude original state, among the ancient *Latins* or *Albans*, to its present state of perfection.

THE LATIN YEAR.

It has been generally supposed that the primitive *Latin*, as well as the *Roman* year, consisted only of ten months, because there are only ten named in the calendars of both. But this is a mistake: both had two anonymous intercalary months to make up the primitive number of 360 days; and these were the same months to which *Numa* afterwards gave the names of *Januarius* and *Februarius* *, as in the annexed Table.

* Sciendum *decem* tantum menses fuisse apud majores—*duo* vero propter rationem signorum anni intercalabantur; qui *postea* a *Jano* et a *Februo* nominati sunt. *Servius* in Virgil. Georg. i. 43.

TABLE II. ANCIENT LATIN AND ROMAN YEAR.

LATINS.		ROMULUS.		NUMA.		DECEMVIRS.	
1. Aprilis	36	1. Martius	31	1. Januarius	29	1. Januarius	29
2. Maius	22	2. Aprilis	30	2. Martius	31	2. Februarius	28
3. Martius	36	3. Maius	31	3. Aprilis	29	3. Martius	31
4. Junius	26	4. Junius	30	4. Maius	31	4. Aprilis	29
5. Quintilis	36	5. Quintilis	31	5. Junius	29	5. Maius	31
6. Sextilis	28	6. Sextilis	30	6. Quintilis	31	6. Junius	29
7. September	16	7. September	30	7. Sextilis	29	7. Quintilis	31
8. October	39	8. October	31	8. September	29	8. Sextilis	29
9. November	30	9. November	30	9. October	31	9. September	29
10. December	35	10. December	30	10. November	29	10. October	31
	304		304	11. December	29	11. November	29
11. Anonymous	33	11. Anonymous	33	12. Februarius	28	12. December	29
12. Anonymous	23	12. Anonymous	23		355		355
	360		360	Intercalary	11	Intercalary	11
					366		366

The irregular division of the ancient Latin months was owing to the unequal divisions of the zodiac, supposed to be occupied by the twelve constellations. Thus, according to *Servius*, *Cancer* had scarcely 17 degrees allotted to him; *Gemini* had about 20; *Leo* about 39; *Virgo* about 46; and *Chelæ*, the claws of *Scorpio*, anciently occupied the room of *Libra*. Reckoning, therefore, that the sun moved through a degree in the ecliptic each day, and 360 degrees, or the whole, in the year, and allotting as many days to each month as there were degrees in the sign belonging to it, the civil months became necessarily unequal. *Servius* on Virgil, Georg. i. 24. This is a curious fact, and shows how early the civil months were changed from lunar to solar.

Year of Romulus.

Romulus made an important reform in the *Latin* months, by bringing them nearer to the true standard, and rendering them more equable. He transposed *Martius* from the third to the first, in honour of *Mars*, the god of war, as he was himself of a warlike disposition.

Year of Numa.

By more accurate observations, *Numa* found that the annual period of the moon, or twelve lunations, amounted to 354 days, and of the sun to 365 days. Instead of the old year, he substituted the lunar, which fell short of the solar by eleven days. Therefore, doubling this deficiency, he intercalated a month of 22 days, at the end of every second year, after the 23d day of the second anonymous month, which he called *February*, from *Februo*, "to purge or purify," from the purifications then usually made by the people, and sacrifices to the *manes*, or infernal deities; and which, therefore, he did not presume to remove, while he transferred the first anonymous month to the head of the calendar, and called it *Januarius*, in honour of *Janus*, the god of time *, descended from יה, *Jah*, the God of the *Hebrews*.

This emendation of the year of *Romulus* marks uncommon

* At *Numa* nec *Janum* nec avitas præterit *Umbras*,
Mensibus antiquis addidit ille duos.—
Primus enim *Jani* mensis, quia *janua* prima est;
Qui sacer est *imis Manibus*, imus erat.
Ovid. Fasti. lib. 1.

skill and sagacity in *Numa*, especially at so early an age, and in a country so remote from *Chaldea* and *Egypt*, those ancient seats of science. His construction of the lunar year, and adjustment to the solar of 365 days, was by far more simple, ingenious, and scientific, than any of the boasted cycles of *Greece* or *Egypt*, even at a later period.

Still, however, *Numa* injured his calendar by a superstitious veneration for odd numbers, as if they were more lucky than even *. This led him to deduct a day from all the even months of *Romulus*. *February*, as being in itself an unlucky month, he left an even number of 28 days, (including the five supernumerary days.) And though *January* ought to have had but 28 days, being the complement of the rest to 354 days, he added a superfluous day thereto, and made it an odd number 29; and so his lunar year 355 days, or a day too much, and thereby occasioned an excess of two days in his *Dieteris*, or biennial cycle.

To rectify this redundancy, of which *Numa* could not be ignorant, we learn from a very obscure passage of *Livy*, in the history of his reign, that "he so managed his intercalations as to make his year *fully* correspond with the solar, in the course of a period of 24 years †." Now this could only be effected by omitting the 24 redundant days in 24 years, or subtracting a month of 24 days from every 24th year. *Jackson*, Vol. ii. p. 62. *Spanheim*, Chron. Sacr. Part 1, p. 10.

YEAR OF THE DECEMVIRS.

The *Decemvirs*, who, according to *Livy* and *Dion. Halicarn.*, were created B.C. 452; *Ovid* ‡ says, was the general belief, made a slight alteration in the order of *Numa's* months, by mak-

* Numero Deus *impare* gaudet.—*Virgil.*

† Ad cursum *lunæ*, in duodecim mensibus describit annum; quem, (quia tricenos dies singulis mensibus luna non explet, desuntque dies solido anno qui solstitiali circumagitur orbe) intercalaribus mensibus interponendis ita dispensavit ut *quarto et vigesimo anno* ad metam eandem *solis* unde orsi essent, *plenis annorum omnium spatiis* dies congruerent. Livy, i. 19. N. B. *Macrobius* has miserably perplexed and perverted the meaning of this passage, by supposing that *Numa* knew the correcter year of 365¼ days, and meant to adjust his cycle of 24 years to the Greek *Octaeteris*. Saturnal. lib. i. 13; and *Scaliger* blames *Numa*.

‡ Postmodo creduntur spatio distantia longo
Tempora *bis quini* continuasse *viri*.—Ovid.

ing *February* the second month instead of the last, and thereby restoring *March* to its former station, according to *Romulus*, as the first month of spring; and this order continued until the time of *Julius Cæsar*, and ever since.

But the Roman calendar having been entrusted to the care of the *Pontifices*, they, through neglect or design, did not make the proper intercalations and corrections *. Sometimes they inserted more, sometimes fewer days than they ought, in order to lengthen or shorten the year, thereby to serve their friends, or injure their enemies, who held public offices. This partiality or corruption, introduced such confusion into the calendar, that the civil months no longer corresponded to the proper seasons of the year, but had shifted their places, and fallen backwards considerably. Thus *Cicero*, four years before *Cæsar's* third consulate, dated the vernal equinox on the ides of *May*, which then in reality fell on the 23d of *March*. *May* therefore had fallen backwards into the place of *March*.

To reform this abuse, *Julius Cæsar*, who was himself a good mathematician, and published a tract on the subject, which is since lost, assisted by *Sosigenes*, an eminent *Alexandrian* astronomer, and others, undertook the arduous but important task of correcting the calendar, and also of reforming the old Roman year, which was lunar in its months, and introducing solar in their stead.

For this purpose, he formed a preparatory year of 15 months, or 445 days, thence called *the year of confusion*. This year began the thirteenth of October, according to the calendar, U.C. 708, or B.C. 46, the day on which he entered upon his third consulate. This day he called the first of *January*, and first intercalated one month of 23 days after the end of *February*, making a broken quarter of 80 days, in order to bring the first of *March*, according to the old system, to its true place of the first of *January* in the new. After which, he intercalated two months more after the old *November*, to make up 12 months; assigning to them 34 and 33 days, or 67 in both, which was the complement of the old 10 months to 365 days, as in the following Table, in which the old and intercalated months are reduced to their true places in the *Julian* year:—

* Diligenter habenda ratio intercalandi est; quod institutum *perite* a Numa, posteriorum pontificum negligentiâ dissolutum est. *Cicero* de Legib. lib. ii.

	Days.		
1. January	29	beginning	October 13.
2. February	28	———	November 11.
3. *Intercalary* I	23	———	December 9.
	80		
4. March	31	———	January 1.
5. April	29	———	February 1.
6. May	31	———	March 2.
7. June.....................	29	———	April 2.
8. Quintilis	31	———	May 1.
9. Sextilis................	29	———	June 1.
10. September	29	———	June 30.
11. October	31	———	July 29.
12. November	29	———	August 29.
13. *Intercalary* II.	34	———	September 27.
14. *Intercalary* III.	33	———	October 31.
15. December	29	———	December 3.
			+ 28.
	365		

This Table is formed from one given by *Petavius*, Vol. i. p. 161, corrected and improved. The Table of *Jackson*, Vol. ii. p. 85, is imperfect and unsatisfactory; it omits the reduction of the several months of the year of confusion to their corresponding beginnings in the *Julian*, and thereby leaves the reader at a loss to account for the interval between the intercalation of the first month after *February*, and of the two others after *November* *.

Thus did this admirable correction, the skill and ingenuity of which will be more admired the more closely it is considered, by its judicious intercalations, bring the beginnings of the new months nearly to a conformity with those of the old, and thereby preserve the *Calends* nearly in their old places; while, by inserting the additional days at the ends of the months, the *Nones* and *Ides* were unaltered: *Cæsar* thereby respecting the prejudices of the vulgar for these holy days.

* This perhaps will explain a passage in *Cicero's* epistle to *Ligarius*, Lib. vi. Epist. 14, which otherwise seems unintelligible: "Ego tamen ad quint. calend. *intercalares priores*, mane venissem ad *Cæsarem.*"

Julian Year.

The reformed year, which succeeded the year of confusion, was called *Julian*, from *Julius Cæsar*, with whose fourth consulate it began, the first of January, U. C. 709, or B. C. 45.

In modelling the months of it, he first restored all the even months of 30 days, instituted by *Romulus*, which *Numa* had altered for the worse, to 29; he next retained the four months of 31 days, used by *Romulus* and *Numa*, and added thereto three more, namely, *January*, *Sextilis*, and *December*. *February* he retained from *Numa*, according to the following Table, including the twelve *Dii Majores*, to whom the months were dedicated. And from which it is remarkable, that *Janus*, the ancient god of time, was excluded, to make way for *Juno Matrona*.

		Days.	
1.	Januarius	31	*Juno.*
2.	Februarius	28	*Neptunus.*
3.	Martius	31	*Minerva.*
4.	Aprilis	30	*Venus.*
5.	Maius	31	*Apollo.*
6.	Junius	30	*Mercurius.*
7.	Quintilis *(Julius)*	31	*Jupiter.*
8.	Sextilis *(Augustus)*	31	*Ceres.*
9.	September	30	*Vulcanus.*
10.	October	31	*Mars.*
11.	November	30	*Diana.*
12.	December	31	*Vesta.*
		365	
	Bissextile	+ 1	
		366	

Is *decies senos*, *tercentum*, et *quinque* diebus
Junxit, et e pleno *tempora quarta* die.
Ovid. Fast. III.

To compensate for the additional quarter of a day, every year above the 365 days, *Julius Cæsar* inserted a whole day every fourth year; which, because it was inserted after the old *terminalia*, or 23d day of *February*, and was therefore reckoned

By this inaccuracy of substituting " the 21*st day of March*," instead of " *the day of the vernal equinox*," as the decree ought to have been worded, in the time of Pope *Gregory* XIII. A.D. 1582, or 1257 years after the Council of *Nice*, the equinox was found to be on the 11th of March, having fallen back ten days. In order, therefore, to bring it forward to its former place of the 21st, he left out ten days in *October*, calling the 5th, the 15th day of that month. Whence, in that year of confusion, the 22d day of December became the first of January A.D. 1583, which was the first year of the *Gregorian Era*. In making this correction, he was principally assisted by the celebrated mathematician *Clavius*.

1. But to prevent the repetition of this error in future, a further reformation of the *Julian* Calendar was wanting. Because the vernal equinox fell backwards three days in the course of 390 years, *Gregory*, chiefly by the assistance of *Aloysius Lillius*, decreed that three days should be omitted in every four centuries: namely, that every first, second, and third centurial year, which would otherwise be bissextile, should be a common year; but that every fourth centurial year should remain bissextile. Thus, the years A.D. 1700, 1800, 1900, and 2100, 2200, 2300, were to be common years; but A.D. 1600, 2000, 2400, to remain leap years.

By this ingenious reform, the *Julian* Calendar is rendered sufficiently accurate for all the purposes of Chronology, and even of Astronomy, for 6000 years to come; because the tropical year itself is subject to a periodical inequality.

2. At the end of 6000 years, a further correction will be necessary. For since the deficiency of the Tropical from the Julian year, 11 min. 3 sec. or 663 seconds, will amount to 265,200 seconds, in the course of 400 years; while three entire days, amounting only to 259,200 seconds, are deficient therefrom 6000 seconds, or one hour and 40 minutes, every 400 years; this deficiency from the correct deduction, will in fifteen such periods, or $15 \times 400 = 6000$ years, amount to 25 hours; or to *one day* and *one hour*. Therefore the omission of one day in every 6000 years (by making the 6000th year common, which would otherwise be bissextile) will leave only *one hour* to be corrected.

3. And this may be done by omitting one day more at the end of 144,000 years, which is the product of 24×6000; in which time the hour will amount to 24, or to one day. And this will

bring every thing right to a second of time; if the world shall last so long *.

The *Gregorian*, or reformed *Julian* year, was not adopted in *England* until A.D. 1751, when, the deficiency from the time of the Council of *Nice* then amounting to eleven days, this number was struck out of the month of *September*, by Act of Parliament; and the 3d day was counted the 14th, in that year of confusion. The next year, A.D. 1752, was the first of the *New Style* †, beginning *January* 1, instead of *March* 25.

The following Tables, selected from the most approved, will be found useful in such *Chronological* calculations as depend upon Astronomy.

* From the analogy of the 6000 years in the second correction, to the six millenary ages of the world; and of the 144,000 years, in the third, to the *sealed number*, in the *Apocalypse*, Rev. vii. 4; xiv. 1—3; the late *Edward King*, Esq. formed a very ingenious, but rather fanciful scheme, of a grand *Sabbatic Era* of 144,000 years, in his *Morsels of Criticism*, Vol. III. p. 188.

† By the Act of 24 Geo. II. A.D. 1752, relative to the Alteration of the Style, it was enacted,

"That *Easter-day*, on which the rest of the *moveable* feasts depend, is always the first Sunday *after* the full moon which happens *upon*, or *next after*, the 21st of March: and if the full moon happens upon a Sunday, Easter-day is the Sunday after."

Here our Legislators seemed to have considered the 21st of March as the earliest Paschal full moon; and in consequence of this, the earliest Easter-day, in the Tables annexed to the Calendar in the *Book of Common Prayer*, is fixed to the 22d of March; and the latest, to April 25, including a range of 35 days; on account of the variations of the time of full moon during a synodical month of 29½ days, added to 7, the variations of Sunday, in that time = 36; from which subducting 1, for the difference between the full moon and Easter-day, the remainder is 35.

But at present, the *vernal equinox*, which they supposed could not be earlier than the 21st of March, now falls on the 20th; and may fall back to the 19th, before the expiration of 130 years. And when this shall be the case, if the mean Paschal new moon shall happen on the 4th of March upon a *Friday*; then to March 4, add 15 days; and the Paschal full moon will fall on the 19th of March, on a *Saturday*; and will coincide with the day of the vernal equinox: and consequently the 20th of March will be *Easter Sunday*, according to the spirit, but not the letter of the Act.

Hence, the Paschal astronomical rule might have been worded more correctly, thus: "*Easter-day* is always the first Sunday *after* the full moon which happens either *upon*, or *next after*, the vernal equinox; which, in the *New Style*, will *ever* fall either on the 19th, or on the 20th day of March; reckoning the hours from midnight."

For this judicious correction, we are indebted to *Kennedy's Astronomy*, p. 362.

By the foregoing Act of Parliament, the beginning of the year was changed from March 25, to the first of January. *Russia* is the only civilized state of Europe that retains the *Old Style*.

TABLE III.—VERNAL EQUINOXES.

B.C. 3500	April	20	B.C. 1105	April	1	B.C. 325	March	26
3100	——	17	975	March	31	195	——	25
2700	——	13	845	——	30	65	——	24
2300	——	10	715	——	29	A.D. 65	——	23
1900	——	7	585	——	28	195	——	22
1500	——	4	455	——	27	325	——	21*

TABLE IV.—JULIAN DAYS.

Days.	*Jan.*	*Feb.*	*March*	*April*	*May*	*June*	*July*	*August*	*Sept.*	*Oct.*	*Nov.*	*Dec.*
1	1	32	60	91	121	152	182	213	244	274	305	335
2	2	33	61	92	122	153	183	214	245	275	306	336
3	3	34	62	93	123	154	184	215	246	276	307	337
4	4	35	63	94	124	155	185	216	247	277	308	338
5	5	36	64	95	125	156	186	217	248	278	309	339
6	6	37	65	96	126	157	187	218	249	279	310	340
7	7	38	66	97	127	158	188	219	250	280	311	341
8	8	39	67	98	128	159	189	220	251	281	312	342
9	9	40	68	99	129	160	190	221	252	282	313	343
10	10	41	69	100	130	161	191	222	253	283	314	344
11	11	42	70	101	131	162	192	223	254	284	315	345
12	12	43	71	102	132	163	193	224	255	285	316	346
13	13	44	72	103	133	164	194	225	256	286	317	347
14	14	45	73	104	134	165	195	226	257	287	318	348
15	15	46	74	105	135	166	196	227	258	288	319	349
16	16	47	75	106	136	167	197	228	259	289	320	350
17	17	48	76	107	137	168	198	229	260	290	321	351
18	18	49	77	108	138	169	199	230	261	291	322	352
19	19	50	78	109	139	170	200	231	262	292	323	353
20	20	51	79	110	140	171	201	232	263	293	324	354
21	21	52	80	111	141	172	202	233	264	294	325	355
22	22	53	81	112	142	173	203	234	265	295	326	356
23	23	54	82	113	143	174	204	235	266	296	327	357
24	24	55	83	114	144	175	205	236	267	297	328	358
25	25	56	84	115	145	176	206	237	268	298	329	359
26	26	57	85	116	146	177	207	238	269	299	330	360
27	27	58	86	117	147	178	208	239	270	300	331	361
28	28	59	87	118	148	179	209	240	271	301	332	362
29	29	†	88	119	149	180	210	241	272	302	333	363
30	30		86	120	150	181	211	242	273	303	334	364
31	31		90		151		212	243		304		365

* The *vernal Equinox* in A. D. 325, fell before March 21; or more correctly, March 20; 8 h. 21 min. according to *Kennedy's* Astronomy, p. 360. See a very ingenious method of finding the times of the *Equinoxes* and *Solstices*, arithmetically, in *Beverege*, Lib. ii. cap. 2. *De Equinoctiis* et *Solstitiis*, p. 145—154. Edit. 3.

† Add one day after this, when it is *Leap year*.

TABLE V.

JULIAN YEARS.

YEARS.	D.	H.	YEARS.	D.	H.
1	365	6	70	25,567	12
2	730	12	80	29,220	
3	1,095	18	90	32,872	12
4	1,461		100	36,525	
5	1,826	6	200	73,050	
6	2,191	12	300	109,575	
7	2,556	18	400	146,100	
8	2,922		500	182,625	
9	3,287	6	600	219,150	
10	3,652	12	700	255,675	
20	7,305		800	292,200	
30	10,957	12	900	328,725	
40	14,610		1,000	365,250	
50	18,262	12	5,000	1,826,250	
60	2,1915		10,000	3,652,500	

TABLE VI.

LUNATIONS. Mayer.

LUNAT.	D.	H.	M.	S.	T.	LUNAT.	D.	H.	M.	S.	T.
1	29	12	44	2	53	60	1,771	20	2	53	0
2	58	1	28	5	46	70	2,067	3	23	21	50
3	88	14	12	8	39	80	2,362	10	43	50	40
4	118	2	59	11	32	90	2,657	18	4	19	30
5	147	15	40	14	25	100	2,953	1	24	48	20
6	177	4	24	17	18	200	5,906	2	49	36	40
7	206	17	8	20	11	300	8,859	4	14	25	0
8	236	5	52	23	4	400	11,812	5	39	13	20
9	265	18	36	25	57	500	14,765	7	4	1	40
10	295	7	20	28	50	600	17,718	8	28	50	0
11	324	20	4	31	43	700	20,671	9	53	38	20
12	354	8	48	34	36	800	23,624	11	18	26	40
20	590	14	40	57	40	900	26,577	12	43	15	0
30	885	22	1	26	30	1,000	29,530	14	8	3	20
40	1,181	5	21	55	20	5,000	147,652	22	40	16	40
50	1,476	12	42	24	10	10,000	295,305	21	20	33	20

TABLE VII.

SOLAR YEARS. Newton.

YEARS.	D.	H.	M.	S.	YEARS.	D.	H.	M.	S.
1	365	5	48	57	60......	21,914	12	57	
2	730	11	37	54	70......	25,556	23	6	30
3	1,095	17	26	51	80......	29,219	9	16	
4	1,460	23	15	48	90......	32,871	19	25	30
5	1,826	5	4	45	100......	36,524	5	35	
6	2,191	10	53	49	200......	73,048	11	10	
7	2,556	16	42	39	300......	109,572	16	45	
8	2,921	22	31	36	400......	146,096	22	20	
9	3,287	4	20	33	500......	182,621	3	55	
10	3,652	10	9	30	600......	219,145	9	30	
11	4,017	15	58	27	700......	255,669	15	5	
12	4,382	21	47	38	800......	292,193	20	40	
20	7,304	20	19		900......	328,718	2	15	
30	10,957	6	28	30	1,000......	365,242	7	50	
40	14,609	16	38		5,000......	1,826,211	15	10	
50	18,262	2	47	30	10,000......	3,652,423	6	20	

TABLE VIII.

SIDEREAL YEARS. Ferguson.

YEARS.	D.	H.	M.	S.	T.	YEARS.	D.	H.	M.	S.	T.
1	365	6	9	14	30	60....	21,915	9	14	13	
2	730	12	18	29		70....	25,567	22	46	55	
3	1,095	18	27	43	30	80....	29,220	12	19	20	
4	1,461	0	36	58		90....	32,873	1	51	45	
5	1,826	6	46	12	30	100....	36,525	15	24	10	
6	2,191	12	55	27		200....	73,051	6	48	20	
7	2,556	19	5	41	30	300....	109,576	22	12	30	
8	2,922	1	13	56		400....	146,102	13	36	40	
9	3,287	7	23	10	30	500....	182,628	5	0	50	
10	3,652	13	32	25		600....	219,153	20	25	0	
11	4,017	19	41	39	30	700....	255,679	11	49	10	
12	4,383	1	50	54		800....	292,205	3	13	20	
20	7,305	3	4	50		900....	328,730	18	37	30	
30	10,957	16	37	15		1,000....	365,256	10	1	40	
40	14,610	6	9	40		5,000....	1,826,282	2	8	20	
50	18,262	19	42	5		10,000....	3,652,594	4	16	40	

Certain precautions, however, are necessary for avoiding mistakes, when we recur to remote *astronomical* observations, where the accurate interval of days is required, however large. For, 1. Although 100 *Julian* years contain 36,525 days, we must keep in mind, that from A.D. 300, to A.D. 1600, there is a deficiency of ten days from the whole amount; eleven days from A.D. 1600, to A.D. 1900; and twelve days from A.D. 1900, to A.D. 2200.

2. In *astronomical* tables, the years before the Christian Era are counted backwards: the supposed year of the Nativity being marked 0 *, the foregoing, 1; the year before that, 2; &c. But *Chronologers* generally reckon the year of the Nativity, B.C. 1; the foregoing, B.C. 2, &c. as follows:

Julian years	41,	42,	43,	44,	45,	—	46,	47,	48,	49.
Astronom.	4,	3,	2,	1,	0,	—	1,	2,	3,	4.
Chronol.	5,	4,	3,	2,	1,	0,	1,	2,	3,	4.

The Astronomers are wrong, and the Chronologers right. For the commencement of the Era, or the fixed point from which we ought to reckon, both forwards and backwards, is *midnight;* which divides the old from the new year: it is the *limit* between both, and as *not belonging to either*, should be marked *zero*, or O: but the *Julian* 45, terminating therein, is a *real* quantity, as much as the year 46, and should be marked −1, or the first of the regressive series, as the latter, +1, is the first of the progressive.

To prevent such ambiguities chiefly, the *Julian Period*, of 7980 years, whose 4714th year corresponded to A.D. 1, was invented by *Joseph Scaliger*, who called it so †, as being accommodated to the *Julian* year, beginning the first of January. By the help of this, the years of the regressive series may be critically ascertained. As an *Astronomical* Cycle, indeed, it is of considerable use.

CYCLES.

Of the various Cycles, or recurring periods of years, noticed by Chronologers, the oldest and most celebrated is

* This is the case, not only in the old astronomical tables of *Calvisius*, &c. but in the modern, *Pingrè*, &c.

† Novam nostram periodum—*Julianam* vocavimus, quia ad annum *Julianum* accommodata, et quidem à Kalendis Januarii. p. 361.

I. The Cycle of the Moon.

The ancient *Greeks* were required, by the Laws and by the Oracles, to sacrifice according to *Months, Days, Years;* which they all interpreted, to regulate their *years* by the *Sun;* their *months* and *days* by the *Moon.* And their principal Games, the *Olympic,* were required to be celebrated every fifth year, (like the Roman *lustra,*) at the full moon next after the *summer solstice.* But as the lunar year was eleven entire days shorter than the solar, their great object was to bring both to a conformity, as near as may be, by occasionally intercalating months in the former, to fill up the deficiency. *Meton,* therefore, a celebrated Astronomer, found out, B.C. 430, that by intercalating 7 lunations in 19 lunar years, they were brought so nearly to a correspondence in length with 19 solar years, that the times of celebrating their games and festivals could be adjusted, both to the new and full moons, and to the equinoxes and solstices, with little variation, by the help of his tables. For a public service so important, he was declared victor in the first class, at the Olympic games, a statue was decreed to him, and his Tables were inscribed upon a marble pillar, in letters of gold. Hence the current years of his Cycle were called the *Golden number.*

But it was found that his Cycle was imperfect: for in 19 years there are sometimes five leap years, at other times only four. Hence the new and full moons computed thereby, sometimes varied a day from the truth, in leap years, after *February.* The only way to remedy this error, was by extending the Cycle to $4 \times 19 = 76$ years, in which there are 19 leap years exactly. This, we may suppose, led *Calippus,* in the ensuing century, to publish the *Calippic* period of 76 years, as an improvement of the *Metonic,* beginning B.C. 330.

But the lunar and solar Tables, constructed on the Lunar Cycle, will require correction, after 310 years. For 235 lunations, amounting to 6939 d. 16 h. 32 m. 28 sec. are deficient from 19 *Julian* years, or 6939 d. 18 h. by a remainder of 1 h. 27 m. 31 sec. or *within an hour* and *half:* and this interval in about 310, or 312 years, will amount to a whole day: so that the new moon, at the end of this period, will anticipate its time at the beginning of it, an entire day, earlier.

Not adverting to this, in our *Prayer-books,* before the altera-

tion of the style, are given "Tables for finding Easter *for ever*," by the help of the *Golden Number*. In consequence of which, the *Ecclesiastical Easter* has several times been a week different from the *true Easter*, before A. D. 1752. But since the *New Style*, that inconvenience has been remedied, by giving Tables to find Easter only for limited times: 1. from 1765 to 1899, inclusive; and 2. from 1900 to 2199, inclusive: by shifting the *Golden Numbers* a day later in the latter Table than in the former.

To find the Golden Number, see the Rules given in the *Prayer-Book*, *Beverege*, *Ferguson*, &c.

II. The Cycle of the Sun.

This is, strictly speaking, the Cycle of the *Sunday letter*. Since a common year consists of 52 weeks, and one day over; if the first year begins on *Sunday*, the second will begin on *Monday*, the third on *Tuesday*, &c. the seventh on *Saturday*, and the eighth on *Sunday* again. And so, if all the years were common, it would be a cycle of seven years. But this order is interrupted by the *Bissextile* every fourth year, in which there are two days over: and this will prevent the recurrence of *Sunday* again, at the beginning of the year, until after a cycle of $4 \times 7 = 28$ years. The same will hold of any other day of the week.

To find the Dominical, or *Sunday letter*, see the rules in the foregoing books.

III. The Cycle of Indiction.

This was a cycle of 15 years, used only by the *Romans*, for appointing the times of certain public taxes; as appears from the title in the Code, *De tributo indicto*. It was established by *Constantine*, A.D. 312, in the room of the heathen *Olympiads*; and was used in the acts of the *General Councils*, *Emperors*, and *Popes*.

IV. The Julian Period.

This celebrated period was formed by the continued multiplication of the Cycles of *the Sun*, 28 years; of *the Moon*, 19 years; and of *Indiction*, 15 years; whose product gives 7980 years. In its first year, the Cycle of the Sun was 1, of the Moon 1, and of Indiction 1; but the three Cycles can never so correspond again, until the end of it. Every intermediate year

will be distinguished by different numbers of those Cycles, until the last year, 7980, when the division by the prime numbers 28, 19, and 15, respectively, will leave no remainders; the numbers themselves then expressing the last years of each cycle.

At the commencement of the Vulgar Era, the year of the current cycle of the *Sun* was 10, of the *Moon* 2, and of *Indiction*, 4; and from these characters, the corresponding year of the *Julian* Period may be found, by the help of the following analytical problem.

To find a number, which being divided by three given integral numbers, 28, 19, *and* 15; *shall leave given remainders,* 10, 2, *and* 4, *respectively.*

Let x be the integral number sought, which, divided by the two first divisors, will leave the remainders required. Then will $\frac{x-10}{28}$, and $\frac{x-2}{19}$, be integers. Put $\frac{x-10}{28}=m$, and $\frac{x-2}{19}=n$; then $x=28m+10$; and $x=19n+2$; and consequently, $n=\frac{28m+8}{19}$, an integer. From this, subtract the nearest integer, $\frac{19m+19}{19}$, and the remainder will be an integer, $\frac{9m-11}{19}=a$; and consequently, $m=\frac{19a+11}{9}$. From this, subtract the nearest integer, $\frac{18a+9}{9}$, and the remainder will also be an integer, $\frac{a+2}{9}=b$. And consequently, $a=9b-2$. Substitute this value of a, in the last found value of m; which will give $m=19b-3$. Substitute this in the first original value of x, and then $x=532b-74$. Hence b will be affirmative; and substituting its least possible value, 1, then $x=532-74=458$. But this number, 458, will fulfil the conditions of the two first divisors; leaving the remainders 10 and 2, respectively.

If now to this number, 458, we add the product of the two first divisors, $28\times19=532$, or any multiple thereof, $532\,y$: supposing y to denote any affirmative integer, the aggregate $532\,y+458$, will equally fulfil the conditions of the two first divisors.

Let this aggregate next be supposed to answer the condition

of the third divisor, 15, also. Then will $\frac{532\ y+458-4}{15}=\frac{532\ y+454}{15}$ be an integer. From it subtract the nearest integer, $\frac{525\ y+450}{15}$, and the remainder will be an integer also, $\frac{7\ y+4}{15}=c$. And consequently $y=\frac{15\ c-4}{7}$. From this, subtract the nearest integer, $\frac{14\ c}{7}$, and the remainder will be an integer, $\frac{c-4}{7}=d$. And consequently $c=7\ d+4$. Substitute now this value of c, in the foregoing value of y, and $y=15\ d+8$. Where d may be either any affirmative integer, or nothing; taking, therefore, its least value, 0, then 15 d, vanishing, $y=8$. Substitute now this value of y, in the aggregate numbers, it becomes $532\times 8+458=4256+458=4714$, which is the year of the *Julian* Period required*.

But the problem may be proposed generally, as in *Simpson's Algebra*, Edit. 4. p. 191.

" *Supposing* e, f, *and* g, *to denote given integers; to find such a value of* x, *as that the quantities* $\frac{x-e}{28}$, $\frac{x-f}{19}$, *and* $\frac{x-g}{15}$, *may be all integers.*

" By making $\frac{x-e}{28}=y$, we have $x=28\ y+e$; which value being substituted in our second expression, it becomes $\frac{28\ y+e-f}{19}$, which as well as y, is to be a whole number: but $\frac{28\ y+e-f}{19}$, by making $b=e-f$, will be $=y+\frac{9\ y+b}{19}$; and therefore $19\ y$, and $18\ y+2\ b$, being both divisible by 19, their difference, $y-2\ b$, must also be divisible by the same number; whence it is evident that one value of y, is $2\ b$; and that $2\ b+19\ z$ (supposing z a whole number) will be a general value of y; and consequently, that $x\ (=28\ y+e)=532\ z+56\ b+e$, is a general value of x, answering the two first conditions.

* This easy and simple method of solving the problem, was originally given in my *Analysis Æquationum*, 1784, p. 99.

"Let this, therefore, be substituted in the remaining expression, $\frac{x-g}{15}$; which, by that means, becomes $\frac{532\,z+56\,b+e-g}{15}=$ $35\,z+3\,b+\frac{7\,z+\beta}{15}$ (supposing $\beta=11\,b+e-g=12e-11\,f-g$.) Here $15\,z$ and $14\,z+2\,\beta$ being both divisible by 15, their difference, $z-2\,\beta$, must likewise be divisible by the same number; and therefore one value of z will be $2\,\beta$, and the general value of $z=2\,\beta+15\,w$: from whence the general value of x ($=532\,z+56\,b+e$) is given $=7980\,w+1064\,\beta+56\,b+e$; which, by restoring the values of b and β, becomes $7980\,w+12825\,e-11760\,f-1064\,g$.

"Now to have all the terms affirmative, and their co-efficients the least possible, let w be taken $=-e+2\,f+g$; whence there results, $4845\,e+4200\,f+6916\,g$, for a new value of x: from which, by expounding e, f, and g, by their given values, and dividing the whole by 7980; the least value of x, which is the remainder of the division, will be known." So far *Simpson*.

From this ingenious and subtile analytical solution it appears,

1. That e, the given number of the *Solar* Cycle, is to be multiplied by 4845 ($=\overline{19\times15}\times17$) or by the least multiple of the *Lunar* and *Indiction* Cycles, which, divided by the *Solar* 28, will leave 1 remainder.

2. That f, the given number of the *lunar* cycle, is to be multiplied by 4200 ($=\overline{28\times15}\times10$) or by the least multiple of the *solar* and *indiction* cycles, which, divided by the *lunar* 19, will leave 1.

3. That g, the given number of the *indiction*, is to be multiplied by 6916 ($=\overline{28\times19}\times13$) or by the least multiple of the *solar* and *lunar* cycles, which, divided by the cycle of *indiction* 15, will leave 1.

4. That the aggregate of these three terms is to be divided by the *Julian* period 7980, and the remainder will be the year required.

Hence is derived *Beverege's Arithmetical* Rule, p. 192, 380.

I. *To find the year of the Julian Period corresponding to certain given years of the Cycles of the Sun, Moon, and Indiction.*

Multiply the given year of the cycle of the sun by 4845; *of the moon by* 4200, *and of indiction by* 6916; *and divide the*

sum of the products by 7980: *the remainder will be the year of the Julian Period required.*

Thus, if we repeat the foregoing example of the given years of the three cycles, A.D. 1.

S	10	× 4845	=	48450
L	2	× 4200	=	8400
I	4	× 6916	=	27664
Divide by 7980				84514

The remainder is—4714, as before.

The converse is,

II. *To find the respective years of the Cycles of the Sun, Moon, and Indiction, corresponding to a given year of the Julian Period.*

Divide the given year by the numbers 28, 19, 15, *successively; the quotients will shew the number of revolutions of each cycle till that time, and the remainders the respective years of each current cycle. If there be no remainders, then the divisors themselves will be the last years of the cycles.*

Thus, if the same year 4714, be divided by 28, 19, 15, sucsessively, the quotients 168, 248, 314, will express the number of revolutions of each cycle, from the beginning of the period till that time; and the remainders, 10, 2, 4, the years of the current cycles respectively.

Hence it appears, that the *Julian* Period began B.C. 4714, and will end A.D. 3266. It does not therefore precede the creation, and include the commencement of *historical* time, as was imagined by its inventor, and the followers of the shorter *Jewish* system of chronology. As an *historical* period, therefore, it is considerably inferior to the *Vulgar Christian Era*, which running infinitely, backwards and forwards, from a well-known fixed point, is immediately commensurate to the whole of duration, past, present, and future.

EPACTS.

Epacts, or ἡμεραι επακται, are "additional days," requisite to find out the moon's age.

Since the lunar year of 354 days is deficient from the solar of 365 days, by 11 days, this deficiency will run through every year of the lunar cycle. Thus the *epact* of the first year of the cycle is 11, because 11 days are to be added to the lunar, in order to

complete the solar year; the epact of the second is 22; the epact of the third 33−30=3, because the moon's age cannot exceed 30 days; the epact of the fourth, 14; and so on till the last year of the cycle, whose epact is 29; and the epact of the first year of the next cycle, 11, as before.

The following Rules will shew the use of Epacts:—

RULE I. *To find the year of the Lunar Cycle, or the Golden Number, in any given year of our Lord.*

Add 1 *to the given year, then divide the sum by* 19, *the remainder, if any, is the golden number; if there be no remainder, then* 19 *is the golden number.*

Thus 1808 divided by 19 leaves 3, which is the golden number of the year 1807.

The reason of the addition of unit, is, because the Vulgar Christian Era began in the second year of the lunar cycle, as shewn before.

RULE II. *To find the Epact in any given year.*

If the year precede the alteration of the style, A.D. 1752;

First find the golden number of that year; multiply it by 11; *if the product be less than* 30, *it will be the epact, but if greater, divide it by* 30, *and the remainder will be the epact.*

But if the year follow A.D. 1752, because eleven days were then struck out of the calendar, the epact so found will require correction.

If it be greater than 11, *subtract* 11 *from it; if less, add to it* 30, *and subtract* 11 *from the sum: the remainder, in either case, will give the epact.*

Thus the golden number of the year 1807, namely 3, multiplied by 11, and the product divided by 30, left 3 for the epact; this again multiplied by 11 gives 33, from which subtracting 11, the remainder 22 gives the corrected epact.

RULE III. *To find the Moon's Age on any given day of the year.*

Add together the epact of the given year, the number of months from March inclusive, and the proposed day of the month; if the sum be less than 30, *it will be the moon's age, but if greater, its remainder, when divided by* 30, *will be the moon's age.*

Thus, if it be required to find the moon's age on November 15,

1807, the epact is 22, the distance from March inclusive 9 months, the day 15. The sum of these is 46, from which subtract 30, the remainder is the moon's age, 16. But upon the 15th of *November*, 1807, the moon was partially eclipsed about 7 in the morning, and consequently, 14 days, 18 hours, 22 minutes, after the true conjunction. But the true and mean conjunctions may differ from each other 12 hours, and this rule is adapted to the mean.

Again, if the moon's age be required on November 29, 1807: to the epact 22, and distance 9, add 29; the sum is 60; which, divided by 30, leaves no remainder: therefore it was new moon that day; and this is verified by a partial eclipse of the sun on that day, about 10½ in the morning.

This simple and ingenious rule will never vary a whole day, or 24 hours, from the mean computed time, and will therefore answer sufficiently for common use.

PASCHAL FULL MOONS.

From the difference between the times of the true and computed *Paschal* new moons, as caleulated astronomically, and computed by such rules as the preceding, which were in use among the *Jews* formerly, (as was the *Calippic period* at that very time*) and which may vary a day in their results, we may naturally account for a circumstance noticed in the Gospels; namely, that our Lord and his disciples ate the passover on *Maundy Thursday*, but the chief priests and their adherents on *Good Friday*. The former day was, ἡ πρωτη των αζυμων, "*the first of the feast of unleavened bread;*" Matt. xxvi. 17; ὁτε το πασχα εθυον, "when they *usually sacrificed the passover;*" Mark xiv. 12; εν ᾗ εδει θυεσθαι το πασχα, "on which *the passover ought to be sacrificed;*" Luke xxii. 7 †. *Thursday*, there-

* See *Spanheim*, Chronol. Sacr. p. 82, who thinks it was introduced with the *Syro-Macedonian* year into *Judæa*, after *Alexander* the Great's time.

† The prime annual feast of the *Passover*, instituted in memory of that signal deliverance of the *Israelites* from Egyptian bondage, when the Lord "*passed over*," or spared the houses of the Israelites, but smote the first-born of the *Egyptians*, was ordained by a perpetual law, to begin on the 14th day of *the moon's age*, at even, about that full moon which fell *upon* or *next after* the day of the vernal equinox. This is collected from *Moses*, Exod. xii. 6—27. as admirably explained by *Josephus* and *Philo*, those great *Jewish* antiquaries and philosophers.

The former says, "*the Passover* was to be sacrificed yearly, τεσσαρακαιδεκατῃ, κατα

fore, was the proper ἡμερα παρασκευη, "*preparation-day,*" Luke xxiii. 54; whereas the next, *Friday*, which was παρασκευη των Ιουδαιων, "*the preparation of the Jews,*" John xix. 42, or their παρασκευη του πασχα, "*preparation of the passover,*" John xix. 14, as distinguished from the former, was improper. *Chrysostom*, Hom. 74, on Matt. xxvi. thinks, "that the chief priests designedly postponed the celebration of the passover, in order to put JESUS to death;" which might have been the case, but the reason here given is sufficient. *Petavius* well accounts for our Lord's sending to a particular householder, with whom he meant to celebrate the passover with his disciples; Matt. xxvi. 18; because he knew *him* to be a strict observer of the legitimate passover, as distinguished from the generality of the *Jews*, who were misled by the authority of the chief priests, Scribes, and Pharisees, to celebrate it improperly. Petav. Vol. II. p. 244.

Philo also mentions a circumstance, by which they might have easily known the legitimate day, even without astronomical calculation. He says, Νουμηνιᾳ γαρ αρχεται φωτιζειν αισθητῳ τῳ φεγγι ὁ ἡλιος σεληνην. "*On the day of the new moon,* the sun begins to illuminate the moon with a sensible light;" which, though it seldom happens so early in our gross atmosphere, yet

σεληνην, εν κριῳ του ἡλιου καθεστωτος, on the 14th, *according to the moon,* when the sun was in *Aries.*" Ant. 3, 10, 5. The latter, that "the *Passover,* a public feast, was to be celebrated, τεσσαρακαιδεκατῃ ἡμερᾳ, μελλοντος του σεληνιακου κυκλου γενεσθαι πλησιφαους. On the 14th day, *when the lunar disk was going to be fully illuminated.*" De Vita Mosis, p. 530. Hence the phrase, "*according to the moon,*" in Josephus, must signify according to the moon's age, reckoned from the true conjunction or new moon, and not from the first *appearance* of the new moon, as the later Rabbins have idly imagined. Otherwise, how could the Passover ever be celebrated in cloudy weather, when the moon was invisible perhaps for a week or fortnight? But to determine the times of mean and true lunar conjunctions, and of the sun's entrance into the first degree of *Aries,* at the vernal intersection of the equinoctial and ecliptic, are nice astronomical problems, even at the present day, requiring accurate tables of the sun and moon's motions. And surely *Moses* must have constructed such, in order to enable his successors to observe properly the indispensable law of the Passover.

It has been suspected, and not without foundation, that the celebrated lunar cycle of 19 years, which *Meton,* the astronomer, introduced into *Greece* for the adjustment of their lunar year with the solar, was borrowed from the ancient *Jewish* tables. This was the opinion of the learned *Anatolius,* bishop of Laodicea, about A.D. 270.

Εχει τοινυν εν τῳ πρωτῳ ετει την νουμηνιαν του πρωτου μηνος, ἡτις ἁπασης εστιν αρχη της εννεακαιδεκαετηριδος.—Εστι δ' ουχ ἡμετερος ὁ λογος, Ιουδαιοις δ' εγιγνωσκετο τοις παλαι και προ Χριστου. "The cycle of 19 years has in the first year the new moon of the first month, which is the beginning of the whole."—"This is not our opinion merely, but it was known to the *Jews* of old, even before CHRIST."

sometimes will; as *Kennedy* demonstrated of the *Paschal* new moon, A.D. 1761, when the 14th day of the month was also the 14th of the moon's age, immediately preceding the full moon, p. 367. And this *vision* of the moon might more frequently happen in the pure and serene climate of *Judea*. And on this was founded the modern Jewish rule, יח, *Iah*, (the numeral letters signifying 18) denoting 18 hours, which they counted backwards from the first vision of the moon, to find the true conjunction. And this is confirmed by the Grecian astronomer *Geminus*, who states, "that when the moon is in *perigee*, and her motion quickest, she does not *usually* appear until the second day, nor in *apogee*, when slowest, until the fourth." The exception in the former case intimating that she might sometimes be seen on the first day.

Near the end of the second century, a violent controversy broke out between the *Greek* and *Roman* Churches, whether the passover ought to be celebrated on the 14th day of the Paschal moon with CHRIST, or on the 15th with *Caiaphas*. *Polycrates*, bishop of *Ephesus*, in a Council held A.D. 197, decreed in favour of the *Quatuordecimans*, alleging the primitive usage; on the other hand, *Victor*, bishop of *Rome*, in a Council held there the ensuing year, decreed in favour of the *Quintadecimans*, and absolutely excommunicated the *Asiatic* Churches for their schism; which was resisted on their part, and so the controversy raged till the council of Nice, A.D. 325, when the emperor *Constantine* put an end to it by a decree in favour of the *Quintadecimans*, who were the most violent, because they had the worst of the argument, and were taxed with *judaizing* by their opponents.

This controversy was afterwards revived in the sixth century, when a Council was held in England about A.D. 599, deciding in favour of the *Quatuordecimans;* when the *Romish* monks, with *Austin* at their head, stirred up *Ethelfrid*, king of Northumberland, to massacre about 1200 monks of the monastery of *Bangor*, who dissented from the authority and usage of the Church of Rome, and much blood was spilt in the war kindled thereby. At length, about A.D. 716, the British Clergy were prevailed on to submit to the Papal decree. See *Spanheim*, p. 682, &c. 1118, &c.

If the year of the crucifixion was A.D. 31, as is most likely, it follows, from an eclipse of the moon, in *Pingré's* tables, April

25th, at 9 afternoon, that the Paschal full moon that year fell on the 27th of March, which, in the calculations of *Newton*, *Ferguson*, and *Lamy*, and the computation of *Bacon*, is reckoned *Tuesday;* but there is sometimes a variation of a day or two in their computations of the days of the week, so that it might have happened on *Thursday*. On the other hand, *Scaliger*, *Dodwell*, and *Mann*, reckon that Paschal full moon, a day earlier, 26th of March *; and *Petavius*, 23d of March. Vol. ii. p. 374. This shews the uncertainty of the precise day of full moon, and supports the foregoing opinion of a double passover.

ECLIPSES.

The word *Eclipse* (εκλειψις) signifies "*failure*," namely, of light. An *eclipse of the sun* is caused by the intervention of the moon, at new, or in conjunction with the sun, intercepting his light from the earth, either totally or partially. An *eclipse of the moon* † is caused by the intervention of the earth, intercepting the sun's light from the moon, when full, or in opposition to the sun, either totally or partially.

The reason why the sun is not eclipsed every new moon, nor the moon at every full, is owing to the inclination of the moon's orbit to the plane of the ecliptic, or earth's orbit, in an angle of about 5½ degrees; in consequence of which, the moon is generally too much elevated above the plane of the ecliptic, or too much depressed below it, for her disk to touch the earth's shadow at full, or for her shadow, or her penumbra, to touch the earth's disk at new.

An eclipse therefore of either luminary can only take place when they are within their proper *limits*, or distances from the nodes or intersections of both orbits. And because the limits of solar eclipses are wider than those of lunar, in general there will be more eclipses of the sun than of the moon. In any year, the number of eclipses of both luminaries cannot be less than *two*, and these will both be of the sun, nor more than *seven:* the usual number is *four;* and it is very rare to have more than *six*.

* See *Bowyer's* Tables of the times of the *Paschal* full moons for A.D. 31, 32, 33, 34, in his *Conjectures on the New Testament*, Note on John vi. 4. p. 149. 3d edit.

† *Manetho*, the Egyptian priest, who flourished about B.C. 304, taught, *Σεληνην εκλειπειν εις το σκιασμα της γης εμπιπτουσαν*, "that the moon was eclipsed by *falling into the earth's shadow*."

But though solar eclipses happen oftener, lunar are more frequently observed in any particular place. For an eclipse of the moon is visible to the inhabitants of half the globe at the same instant; whereas, an eclipse of the sun is visible only within that part of the earth's surface, traversed by the moon's total shadow, and by her penumbra, or partial shadow. But her total shadow, when she is nearest to the earth, cannot cover a space of more than 158 geographical miles in diameter, nor at her mean distance more than 79, and at her greatest distance may not touch the earth at all. In the two former cases, the sun will be eclipsed in the places covered by the shadow totally, or by the penumbra partially: in the last it may be *annular*, but not total. Without the reach of the shadow, and within the limits of the penumbra, which cannot cover more than 4552 miles of the earth's surface, there will be a partial eclipse of the sun, and without these limits no eclipse at all. Hence lunar eclipses are more frequently noticed by historians than solar; and *Diogenes Laertius* may be credited, when he relates, that during the period in which the *Egyptians* had observed 832 eclipses of the moon, they had only observed 373 of the sun.

In the midst of a total lunar eclipse, the moon's disk is frequently visible, and of a deep red or copperish colour. This, in the poetic language of sacred prophecy, is expressed by "*the moon's being turned into blood.*" Joel ii. 31. This remarkable phænomenon is caused by the sun's lateral rays in their passage through the dense atmosphere of the earth, being inflected into the shadow by refraction, and falling pretty copiously upon the moon's disk, are reflected from thence to the eye of the spectator. If the earth had no atmosphere, the moon's disk would then be as black as in a solar eclipse.

A total eclipse of the moon may occasion a privation of her light for an *hour and a half*, during her total immersion in the shadow; whereas, a total eclipse of the sun can never last in any particular place above *four minutes*, when the moon is nearest to the earth, and her shadow thickest.

Hence it appears, that the darkness which "overspread the whole land of *Judea*," at the time of our Lord's crucifixion, was præternatural, "from the sixth until the ninth hour," or from noon till three in the afternoon, in its *duration*, and also in its *time*, about full moon, when the moon could not possibly eclipse the sun. The time it happened, and the fact itself, are recorded

in a curious and valuable passage of a respectable Roman Consul, *Aurelius Cassiodorius Senator*, about A.D. 514.

"In the consulate of *Tiberius Cæsar Aug.* V. and *Ælius Sejanus*, (U.C. 784. A.D. 31.) OUR LORD JESUS CHRIST suffered, on the 8th of the Calends of April: (25th of March) *When there happened such an eclipse of the sun as was never before nor since* *."

In this year, and in this day, agree also the Council of *Cæsarea*, A.D. 196, or 198; the *Alexandrian* Chronicle, *Maximus* Monachus, *Nicephorus Constantinus*, *Cedrenus;* and in this year, but on different days, concur *Eusebius* and *Epiphanius*, followed by *Kepler*, *Bucher*, *Patinus*, and *Petavius*, some reckoning it the 10th of the Calends of April, others the 13th. Amidst this variety of days, we may look on the 26th or 27th of March as the most probable, noticed in the foregoing article.

And indeed that the passover of the crucifixion was an early one, may be collected from the circumstance of "the servants and officers having made a fire of coals in the hall of the high-priest's house, *for it was cold*, at which they and *Peter* warmed themselves." John xviii. 19; Luke xxii. 55; Mark xiv. 54. Whereas the passovers of the two ensuing years, A.D. 32, April 14, and A.D. 33, April 3, were later in the season, and probably milder.

The præternatural darkness at the crucifixion was accompanied by an earthquake, which altogether struck the spectators, and among them the centurion and Roman guard, with *great fear*, and a conviction that JESUS WAS THE SON OF GOD. Matt. xxvii. 51—54.

There was also a remarkable paleness of the sun on the year of *Julius Cæsar's* assassination, B.C. 44, attributed by astronomers to an unusual number of spots on the sun's disk; which *Mark Anthony*, in a letter to *Hyrcanus*, high priest of the Jews, written after the defeat and death of Cæsar's assassins, *Brutus* and *Cassius*, attributed to the divine displeasure. "On account of these enormities, *the sun, we think, was turned away, who, even himself, viewed with displeasure the crime against Cæsar* †."

* His consulibus, *Tiberio Cæsare Aug. V. Ælio Sejano*, DOMINUS NOSTER JESUS CHRISTUS passus est 8 Calend. Aprilis: *Et defectio solis facta est, qualis ante vel postmodum nunquam fuit.* Scaliger, De Emend. Temp. p. 563.

† Δι' ἁ (ανομηματα) και τον ἡλιον απεστραφθαι δοκουμεν, ὁς και αηδως επειδε το επι Καισαρι μυσος. *Joseph.* Ant. 14, 12, 3.

II. *Eclipses* among the ancients, before their cause was known, were considered as *signs of the times*, and indications of divine displeasure. They are so represented even in SCRIPTURE.

The prophet *Amos*, who wrote two years before "*the great earthquake*," which probably happened near the end of *Jeroboam* II.'s reign, thus predicts it, and an extraordinary eclipse of the sun:—

"Shall not the land *quake* for this? [the sins of the people.] And it shall come to pass, in that day, saith the LORD GOD, that *I will cause the sun to go down at noon*, and *I will darken the earth in the clear day;* and I will turn your *feasts* into mourning, and your songs into lamentations." Amos viii. 8—10. And our Lord himself, among the prognostics of his second coming in glory, foretels, "And there shall be *signs* in the *sun*, and *moon*, and *stars*," &c. Luke xxi. 25. Hence, the *Jews* were warned against the superstitious notions of the heathens, attributing to the luminaries themselves (as in the case of *Anthony)* sense and intelligence, and a powerful influence over human affairs. "Thus saith the LORD: *Learn not the ways of the heathen*, and *be not dismayed at the signs of the heavens, for the heathen are dismayed at them.*" Jer. x. 2. Thus, the battle between the *Medes* and *Lydians* was put an end to by the solar eclipse of B.C. 603; and on the outsetting of *Xerxes* from *Sardis*, on the expedition against Greece, (though more probably from *Susa* the year before) *Herodotus* relates, that "the sun quitting his place in the heavens disappeared; and though the sky was free from clouds, and perfectly serene, *instead of day it became night. Xerxes* observing this with surprise, and no small anxiety, enquired of the *Magi* what might be the meaning of the prodigy? They answered, that the gods by this presage plainly foretold the destruction of the *Grecian* states, because the *sun* was the protector of *Greece*, but the *moon* of the *Persians*." Herodot. B. vii. 37. The disastrous issue of this expedition to the *Persians* remarkably confirmed the observation of *Isaiah:* "That THE LORD frustrateth the *signs* of the liars, and maketh the diviners mad; he turneth wise men backwards, and maketh their wisdom foolishness." Isa. xliv. 25. The *Magi* were the established priests and diviners of the *Persian* empire.

Livy also mentions an eclipse of the sun, in the consulate of *M. Valerius Messala*, and *C. Livius Salinator*, U.C. 561, B.C. 188, July 17, for which the College of Decemvirs decreed *a public supplication for three days.* Liv. 38, 36.

III. How early Eclipses began to be calculated by the ancients does not appear. In the age of *Thales*, at least, the elements of the calculation of eclipses were known in *Greece;* for *Herodotus* says, that he foretold to the *Ionians* the year of the remarkable eclipse that put an end to the battle between the *Medes* and *Lydians*. Herodot. B. 1. 74. *Anaxagoras*, also, predicted that remarkable eclipse of the sun, mentioned by *Thucydides* to have happened in the first year of the *Peloponnesian war*, July 1, B.C. 431. And *Livy* states, that *Sulpicius Gallus* predicted with great accuracy a *lunar* eclipse, which happened on the night before the battle of *Pydna*, in which the Romans defeated *Perseus*, king of Macedon, June 21, U.C. 586, B.C. 168. "When the *Roman* soldiers looked on the wisdom of *Gallus* as almost divine; but the Macedonians and their priests were alarmed thereat, as an ominous prodigy portending the fall of the kingdom, and destruction of the nation; and there was a clamour and a howling in the Macedonian camp, until the moon emerged again into her own light." Liv. 44, 27.

Costard conjectures that *Thales* and *Anaxagoras*, in their computations, made use of the celebrated Chaldean *Saros*, or cycle, mentioned by *Pliny;* which "was a period of 223 lunations in the course of 18 Julian years and 11 days: in which the returns of eclipses, and other phænomena of the moon's motions, are very regularly performed;" in the judgment of *Halley*, that great astronomer, who, from an eclipse of the sun, observed at *London* and *Dantzic*, June 22, 1666, by the help of the Chaldean *Saros*, was enabled to calculate another, eighteen years after, July 2, 1684, with an exactness little inferior to the observation itself at the time. *Costard.* Astron. p. 94.

To this Chaldean period *Theocritus* probably alluded, when he styled *Adonis*, or the sun,

> Οκτωκαιδεκατης η εννεακαιδεκ' ὁ γαμβρος,
>
> "*The bridegroom* of *eighteen* or *nineteen years.*"—*Idyll.* 15.

The *ecliptic* conjunctions of the sun and moon being represented, in mythological language, as a marriage.

The same imagery was used in SCRIPTURE by *David*, near 800 years before *Theocritus*, where he describes the sun as "a *bridegroom* coming out of his chamber." Ps. xix. 5.

IV. *Eclipses* are justly reckoned among the surest and most unerring characters of Chronology: for they can be calculated with great exactness backwards as well as forwards; and there

is such a variety of distinct circumstances of the *time* when, and the *place* where they were seen; of the *duration*, or beginning, middle, or end of every eclipse, and of the *quantity*, or number of digits eclipsed; that there is no danger of confounding any two eclipses together, when the circumstances attending each are noticed with any tolerable degree of precision.

Thus, to an eclipse of the moon incidentally noticed by the great Jewish Chronologer, *Josephus*, shortly before the death of *Herod* the Great, we owe the determination of the true year of our Saviour's nativity.

During *Herod's* last illness, and not many days before his death, there happened an eclipse of the moon on the very night that he burnt alive *Matthias*, and the ringleaders of a sedition, in which the golden eagle, which he had consecrated and set up over the gate of the temple, was pulled down and broke to pieces by these zealots. This eclipse happened, by calculation, March 13, U. C. 750, B. C. 4. Antiq. 17, 6, 4. p. 768. Hudson's Edit.

But it is certain from Scripture, that CHRIST was born during *Herod's* reign; and from the visit of the *Magi* to Jerusalem "*from the East*," (απο ανατολων) from the *Parthian* empire, to enquire for the true "born *king of the Jews*," whose star they had seen "at *its rising*;" (εν τῃ ανατολῃ *) and also from the age of the infants massacred at *Bethlehem*, "from *two years old and under*." Matt. ii. 1—16. It is no less certain, that JESUS could not have been born later than U. C. 749, or B. C. 5, which is the year assigned to the nativity by *Chrysostom*, *Petavius*, *Prideaux*, and adopted in this work.

The star seen by these eastern *Magi* could not have been an ordinary star, or meteor; for when it re-appeared on their way to Bethlehem, "it conducted them, till it came and stood over the house where the young child was." Matt. ii. 9. It was, probably, the same "*glory of the Lord*" which, on the night of the nativity, "*shone round about*" the pious shepherds near *Bethlehem*, and might therefore have been of a globular form, which "*ascended into the heaven*," along with the celestial choir, Luke ii. 8—15, and might have been seen in its ascent by the *Magi* at the distance of five or six hundred miles, diminished to the size of a star, or meteor, and rising from the land of *Judea*, in the south-west quarter of the horizon, an unu-

* Ανατολαι denote the "*risings*" of the stars in general, or *the East;* but the singular, ἡ ανατολη, "*the rising*" of a particular star.

sual region, which must have strongly attracted their notice and attention. And if, according to *Theophylact*, these *Magi* were the descendants of *Balaam*, the celebrated Chaldean diviner, who prophesied of "the *Star* to rise out of *Jacob*, and the *Sceptre* from *Israel*;" Numb. xxiv. 17; and also of the School of *Daniel*, the prophet, at *Babylon*, who was appointed *Archimagus* by *Nebuchadnezzar*, Dan. ii. 48, and foretold the precise time of the coming of "*Messiah*, the *Prince*," Dan. ix. 25, we may naturally account for their journey to Jerusalem, their enquiry, their excessive joy on the re-appearance of the star, and their adoration of the divine child, who was indeed "a *light* to lighten the *Gentiles*, and a *glory* to his people *Israel*;" Luke ii. 23; "*the day-spring* (ἡ ανατολη) from on high;" Luke i. 78; "the *bright* and *morning star*;" Rev. xxii. 16; "the *day star* which rises in our hearts;" 2 Pet. i. 19.

Tables of ancient eclipses before the Christian Era, from B. C. 753 are furnished by *Playfair* in his Chronology, and by *Ferguson* in his Astronomy; and from B. C. 1000, computed by *Pingré*, *Hist. Acad. Bell. Lettr.* Paris, 1786. Among the most remarkable and important are the following:

TABLE IX. ANCIENT ECLIPSES.

B. C.		
753.	S.	April 21. Old calculation; the day of the foundation of *Rome*. *Plutarch*.
	S.	July 5. Aft. 4, 30; dig. 4.
721.	M.	March 19. Aft. 10, 34, total; first year of *Mardok Empad*, king of Babylon. *Ptolomy*.
720.	S.	February 22. Morn. 10; dig. 8½. *China*.
720.	M.	March 8. Aft. 11, 56; dig. 3⅓; second of *Mardok Empad*. *Ptolomy*.
715.	S.	May 26. Aft. 5, 12; dig. 9⅕; death of *Romulus*. *Livy*.
621.	M.	April 21. Morn. 6, 22; dig. 2½; fifth of *Nabopolassar*. *Ptolomy*.
607.	S.	July 30. Aft. 1, 55; dig. 8; supposed eclipse of *Thales*, according to *Calvisius*.
603.	S.	May 18. Morn. 9½, total; same, *Costard*, *Montucla*, *Kennedy*.
601.	S.	September 19. Morn. 10, 57; dig. 9; same, *Usher*.

597. S. July 9. Aft. 3; dig. 10, 33′; same, *Petavius*, *Marsham*, *Bouhier*, *Larcher*.
585. S. May 28. Aft. 3; dig. 11, 20′; same, *Pliny*, *Scaliger*, *Newton*, *Ferguson*, *Vignoles*, *Jackson*.
547. S. October 22. Aft. 0, 35, total; when *Cyrus* took *Larissa* in *Media*. *Xenophon*. Anab.
523. M. July 17. Morn. 0, 12; dig. 7½; seventh of *Cambyses*. *Ptolomy*.
502. M. November 19. Morn. 8, 21; dig. 2; twentieth of *Darius Hystaspes*.
491. M. April 25. Morn. 0, 12; dig. 1⅗; thirty-fourth of *Darius Hystaspes*.
481. S. April 19. Aft. 2, 27; dig. 7; when *Xerxes* left *Susa* to invade *Greece*. *Herodotus*.
480. S. October 2. Aft. 2; dig. 8; soon after the battle of *Salamis*. *Herodotus*.
478. S. February 13. Aft. 2; dig. 11½; year after the Persian war.
463. S. April 30. Aft. 3; dig. 11; *Egyptians* revolt from the *Persians*.
431. S. August 3. Aft. 5, 53; total; first year of the *Peloponnesian* war. *Thucydides*.
424. S. March 22. Morn. 6, 34; dig. 9; eighth year of the war. *Thucydides*.
413. M. August 27. Aft. 10, 15; total; nineteenth year of the war; defeat of *Nicias* and the *Athenians* at *Syracuse*. *Thucydides*.
406. M. April 15. Aft. 8, 50; total; twenty-sixth year of the war.
404. S. September 2. Morn. 9, 16; last year of the war. *Xenophon*.
394. S. August 14. Morn. 9, 17; dig. 11; *Conon* defeats the Lacedæmonians in a sea-fight at *Cnidus*. *Xenophon*.
331. M. September 20. Aft. 6, 35; total; eleven days before the battle of *Arbela*. *Plutarch*.
200. M. March 19. Morn. 2, 48; total. } *Ptolomy*.
September 11. Morn. 2, 15; total. }
First year of the *Macedonian* war.
190. S. March 14. Morn. 6; dig. 11; first year of the *Syrian* war.
188. S. July 17. Morn. 8, 38; dig. 10; three days' supplication decreed at Rome. *Livy*, 34, 36.

168. M. June 21. Aft. 8, 2; total; night before the battle of *Pydna*, and end of the *Macedonian* war. *Livy.*

63. M. October 27. Aft. 6, 22; total; *Jerusalem* taken by *Pompey* this year.

48. M. January 18. Aft. 10; total; battle of *Pharsalia;* death of *Pompey* this year.

45. M. November 7. Morn. 2; total; first *Julian* year.

31. S. August 20. Sun-set, great eclipse; battle of *Actium*, Sept. 3.

4. M. March 13. Morn. 2, 45; dig. 6; before *Herod* the Great's death. *Josephus.*

A. D.

14. M. September 27. Morn. 5; total; mutiny of the *Pannonian* legions quelled thereby, after the death of *Augustus*. *Tacitus*, Annal. 1.

29. S. November 24. Morn. 9½; total; death of John Baptist this year.

31. M. April 25. Aft. 9; dig. 4; a month after the crucifixion.

33. S. September 12. Morn. 10½; annular.

45. S. August 1. Morn. 10; dig. 5; birth-day of the emperor *Claudius*.

46. M. December 31. Aft. 9½; total.

59. S. April 30. Aft. 1; central; *Nero* murdered his mother *Agrippina* this year.

69. M. October 18. Aft. 10; dig. 11; night of the battle of *Cremona* between the armies of *Vespasian* and *Vitellius*. Dio. lib. 65. Tacit. Hist. 3, 23. The year before the destruction of *Jerusalem* by *Titus*, A. D. 70, hereby ascertained.

ECLIPSE OF THALES.

This celebrated eclipse forms one of the most important elements for connecting and adjusting the *Assyrian*, *Babylonian*, *Median*, *Lydian*, *Scythian*, and *Grecian* Chronology, at an interesting and eventful period of their histories. But it has hitherto proved an apple of discord among Chronologers: six several solar eclipses having been adopted by different writers, as the eclipse in question. See the foregoing list.

The cause of this confusion has originated from the vague and imperfect account given of it, incidentally, by *Herodotus*, B. 1. § 74, as follows:

"In the sixth year of the war between the *Medes* and *Lydians*, on account of the refugee *Scythians*, whom *Alyattes*, King of *Lydia*, refused to deliver up to *Cyaxares*, King of *Media;* during an obstinate battle, *the day suddenly became night. Thales*, the Milesian, had foretold this alteration to the *Ionians*, and named the year when it should happen. The *Lydians* and *Medes* seeing darkness take place of light, desisted from fighting, and shewed a great inclination on both sides to make peace. *Syennesis*, King of *Cilicia*, and *Labynetus*, of *Babylon*, were the mediators thereof; who expedited the treaty, and confirmed it by a marriage; persuaded that treaties cannot be lasting without a powerful bond of union. They engaged *Alyattes* to give his daughter, *Aryenis*, in marriage to *Astyages*, the son of *Cyaxares*."

1. The only discriminating circumstance of this eclipse, recorded by *Herodotus*, and which he afterwards repeats, § 103, namely, that "*the day suddenly became night* *;" intimates that it was total. Consequently, four of the Eclipses, B.C. 607, 601, 597, 585, are excluded, because they were all partial, more or less; and only the eclipse of B. C. 603 is left; which, according to the accurate calculation of *Mayer*, in his Memoire, entitled *Chronologia Scythica*, of the *Petersburgh Transactions*, A. D. 1728, proved to be total et *cum morâ;* the moon being then in perigee, and the sun in apogee. And his calculation was afterwards verified by two English Astronomers, *Costard* and *Stukely*, respecting the quantity of the eclipse, and the track of the moon's shadow on the earth's disk; in the *Philosophical Transactions*, A. D. 1754.

According to their joint calculations, the moon's shadow in the eclipse of B.C. 603, entered upon the earth's disk about 23 degrees of longitude, reckoned from the Isle of *Ferro*, and one degree north of the equator. It traversed the mouths of the *Nile*, crossed the *Mediterranean*, passed through *Cilicia* and *Cappadocia*, as far as *Trebisonde*, under a breadth of 46 German miles; and therefore traversed the field of battle, which probably was near the mouth of the river *Halys*, about half after nine in

* Ἡ ἡμερα εξαπινης νυξ εγενετο.

the morning; at which time of the day it was likely that the engagement had commenced.

2. The other eclipses are also excluded on account of their tracks. For that of B. C. 585, followed the course of the *Mediterranean* Sea, and did not touch *Cappadocia;* that of B. C. 597, traversed *Scythia* and the *Palus Mæotis,* north of the *Caspian* Sea; that of B. C. 601, passed considerably to the north of the *Euxine* Sea; and that of B. C. 607, traversed the earth's disk, in the vicinity and direction of the equator. Consequently, none of these eclipses, even supposing they had been total, could have been the eclipses coarsely predicted by *Thales;* who noticed only the year, but not the day or hour of the eclipse.

See *Montucla, Histoire des Mathematiques,* Tom. II. p. 101, 713. Edit. second.

PRECESSION OF THE EQUINOXES.

This is a real retrograde motion of the equinoctial points, (or intersections of the *Equinoctial* and *Ecliptic* circles,) in consequence of which, the longitudes of all the fixed stars, are continually, though slowly, increasing. It is not, therefore, to be confounded with the anticipation of the time of the *vernal equinox,* or exact commencement of the Solar or Tropical year, which is above 11 minutes shorter than the Civil, or *Julian* year; and consequently begins so much earlier than it, every successive year.

The precession of the Equinoxes was a nicety in practical Astronomy, which does not appear to have been suspected by any of the Ancients before the time of *Hipparchus.* This prince of *Grecian* astronomers, by comparing his own observations of the bright star Spica *Virginis,* B. C. 128, with those of his predecessors, found a sensible increase in its longitude; which he attributed to a progressive motion of the orb, or sphere, in which they were supposed at that time to be set; and rated it at one degree in a century. But, according to *Ptolomy,* "*he hesitated,*" (διστaζε δ' ὁμως) as to the precise quantity, because the preceding observations of *Timochares,* B. C. 380, were but coarsely made; and also because the interval of 150 years, elapsed between their observations, *was not yet become sufficient to induce firm conviction,* (ουχ ἱκανον ηδη γεγονεναι προς βεβαιαν καταληψιν.) It is, however, a remarkable proof of the accuracy of the observations of both, that the difference of two degrees of longitude, in the

course of 150 years, gives 1 degree in 75 years, at 48 seconds in one year; which approaches surprisingly near to 71½ years, which is now found to be the correct rate of the increase, at 50⅓ seconds in one year; after the observations of 2000 years made with the nicest instruments, and most exquisite skill of modern Astronomy.

The sagacity of *Joseph Scaliger* first discovered that this motion was only apparent in the stars, and that it was owing, in fact, to the retrograde motion of the equinoctial points themselves: as thus expressed in his own words: His igitur animadversis, constat *Æquinoctialia puncta moveri;* ideoque [*Coluros* seu] *circulos ad ea descriptos;* et consequenter, *polos eorum, esse mobiles.* De Emend. Temp. p. 284, 285.

But it was reserved for the superior intelligence of a *Newton*, to trace the fact to its physical cause. He found, that it was occasioned by the oblate figure of the earth, which itself probably arises, or is increased, at least, by the earth's rotation round its axis; in consequence of which, the earth's equatorial diameter is nearly 37 English miles longer than the polar diameter, or axis. As more matter, therefore, is accumulated all round the equatorial parts of the earth than elsewhere, the sun and moon, when on either side of the equator, by attracting this redundant matter, which forms, as it were, a ring or belt round the earth, brings the equator sooner under them, in every return towards it, than if there was no such accumulation; and produces a retrogression of its intersections with the plane of the ecliptic, similar to, but much slower than, the retrogression of the moon's nodes.

The moon has a greater effect on these accumulated parts of the earth about the equator, than the sun, because she is nearer. *Newton* estimated the effect of the sun's attraction, in producing the annual precession, 9 seconds, 7 thirds; and of the moon's, 40 seconds, 52 thirds; and of both, 50 seconds. *Principia*, Lib. III. prop. 39. Later observations make it a little more, about 50⅓ seconds. See *Hutton's* Mathematical Dictionary, *Precession of the Equinoxes.*

Hence, the rate of the precession is 1 degree in 71½ years; 1 deg. 23 min. 53⅓ sec. in a century; and 360 degrees, or an entire revolution, in 25,748 years.

From this shifting of the equinoctial points backwards, and with them all the signs of the ecliptic, it follows, that those stars, which, in the infancy of *Grecian* Astronomy, were in *Aries*, are

now found in *Taurus;* those of *Taurus*, in *Gemini*, &c. In consequence of which, the stars that rose or set at particular seasons of the year, in the times of *Job*, *Hesiod*, *Eudoxus*, *Virgil*, *Pliny*, *Columella*, &c. no longer correspond to those particular seasons, at present. The difference of ancient and modern longitudes, if known, will easily give the difference of times.

GENERATIONS.

This was the earliest mode of computing considerable periods of time, employed in Sacred and Profane History.

The periods from the Creation to the Deluge, and from the Deluge to the birth of Abraham, are expressly so defined in Scripture, Gen. chap. v. and xi. And the reckoning by generations was adopted by the earliest Greek Historians, *Pherecydes*, *Epimenides*, and *Ephorus*. *Newton's* Chron. p. 2.

A generation is the interval of time elapsed between the births of the father and of his son. This interval, therefore, is variable; 1. according to the standard of human life; and 2. according as the generations are counted by eldest, middle, or youngest sons. Dividing human life into three stages, or climacterics, the generative faculty is generally found to subsist in its vigour during the second stage, or between 21 years and 42 years, at the present lowest reduction of the standard: whence, 33 years has been usually adopted in all countries, as the mean length of a generation; or three generations reckoned equivalent to a century. This was the computation of the *Egyptians* and *Greeks*, according to *Herodotus*, b. 2. And the *Hindus* also allowed a hundred years for three generations; according to Sir *William Jones*, in the *Asiatic Researches*, Vol. II. p. 136, octavo.

REIGNS.

The computation by reigns, was also employed for the same purpose, both in Sacred and Profane History. The chronology of the *Judges* and *Kings* of *Israel* and *Judah*, until the end of the *Babylonish* Captivity, was so adjusted; and the *Assyrian*, *Babylonian*, *Median*, *Lydian*, *Persian*, *Egyptian*, *Grecian*, and *Roman* Chronology, by their respective Historians.

Reigns, however, furnish more variable and uncertain measures of time than generations; because "Kings are succeeded not only by their *eldest* sons, but sometimes by their *brothers:* and

sometimes they are *slain*, or *deposed*, and succeeded by others of an *equal* or *greater* age; especially in *elective*, or *turbulent* kingdoms." *Newton's* Chron. p. 54. Whence *Newton* concludes, that, "by the ordinary *course of Nature*, kings reign, one with another, about *eighteen* or *twenty* years apiece: and if, in some instances, they reign, one with another, five or six years longer, in others, they reign as much shorter:—*eighteen* or *twenty years is a medium*;" p. 53. And he states the proportion of mean reigns to mean generations, as 19 to 33⅓, or as 4 to 7: thus reckoning generations nearly double the length of reigns. P. 57, 118.

This standard of reigns is collected from eleven cases adduced by *Newton*, which certainly give the average of 19 years to a reign. But in three of those cases, the reigns are uncommonly short; 11⅔, 15¼, and 17¼ years apiece: and deducting these, the eight remaining cases furnish an average of nearly 21 years apiece.

And a fairer and fuller induction of particular cases, will furnish a higher average.

1. *Syncellus* gives a list of *Egyptian* kings, in which 59 kings, *Tethmosis*, &c. from the Exode of the Israelites, B.C. 1649, to the final reduction of Egypt by the Persians, B.C. 350, reigned 1299 years; or 22 years apiece.

2. The *Parian* Chronicle and *Eusebius*, furnish a list of 30 *Athenian* kings from *Cecrops*, B.C. 1558, to *Alcmæon*, ending B.C. 754, who reigned 804 years; or 26⅘ years apiece.

3. *Herodotus* mentions 22 kings of *Lydia*, *Argon*, &c. B.C. 1223, ending with *Candaules*, B.C. 718, who reigned 505 years; or nearly 23 years apiece.

4. The 18 kings of *Judah*, *Rehoboam*, &c. B.C. 990, ending with *Zedekiah*, B.C. 586, and the destruction of the Temple, by *Nebuchadnezzar*, reigned 404 years, or 22$\frac{4}{9}$ years apiece.

5. In *England*, 31 kings, from *William* the Conqueror, A.D. 1066, to the end of *George* II. B.C. 1760, reigned 694 years, or 22⅖ years apiece.

6. In *Scotland*, 33 kings, from *Malcolm* I. A.D. 938, to the end of *James* I. in *England*, A.D. 1625, reigned 687 years, or nearly 21 years apiece.

7. In *France*, 32 kings, from *Hugh Capet*, A.D. 987, to the murder of *Louis* XVI. in 1793, reigned 806 years, or 25 years apiece.

8. In *Spain*, 32 kings, from *Ferdinand* the Great, A.D. 1027, to *Charles* III. ending 1788, reigned 761 years, or near 24 years apiece.

9. In *Germany*, 55 emperors, from *Charlemagne*, A.D. 800, to *Leopold* II. ending 1792, reigned 992 years, or 18 years apiece.

10. In *Hindustan*, the Brahmins reckon 142 modern reigns in a period of 3153 years, or nearly 22½ years apiece. *Asiat. Research.* Vol. II. p. 143.

The average of these ten cases, is 22⅓ years to a reign, in a series of 454 kings, in 10,105 years. From this great scale of comparison, therefore, we are abundantly warranted to fix the average standard of reigns at 22⅓ years, which will give the proportion of generations to reigns, as 33⅓ to 22⅓, or 3 to 2, nearly.

Newton's defective standard of reigns was occasioned by his overlooking the circumstance of *Minorities* in hereditary kingdoms, and *Interregna*, or vacancies in elective; which may sometimes make a moderate series of Reigns equal, if not exceed, Generations. See the cases in point of the seventeen kings of *Sparta*, and the seven kings of *Rome*, in the Review of *Newton's* Chronology.

EPOCHS AND ERAS.

To ascertain the times of events, certain fixed points, or instants of time, have been assumed by Chronologers, from which they begin to reckon, or to which they refer these events. The term *epoch*, (εποχη) signifies "*a stop*;" because, says *Scaliger*, illis *sistantur* et terminentur mensuræ temporum, "in them *stop* and terminate the measures of times." It now usually denotes a remarkable date; as, the epoch of the destruction of *Troy*, B.C. 1183, &c.

The term *Era*, (not *Æra*, as incorrectly written) is Spanish, signifying *time*, as in the phrase, *de era en era*, "from time to time*." It was first used in the *Era Hispanica*, instituted B.C. 38, in honour of *Augustus*, when *Spain* was allotted to him, in the distribution of the provinces among the second Triumvirate, *Augustus*, *Anthony*, and *Lepidus*. The *Gothic* historians use it as a synonyme to *year*: thus *Isidore's* Chronicle:

Era 415, *Anno* 13 *Valentis Imp.* &c.

* See *Spelman's Glossary*, voce *Era*, p. 243—245.

Era 419, *An. imperii Theodosii Hisp.* 3, &c.
Era 446, *An.* 14 *Arcadii et Honorii.*

It now usually denotes an indefinite series of years, beginning from some known *epoch;* and so differs from a *period*, which is a definite series: as the Era of the foundation of *Rome*, the *Era of the Olympiads*, the Era of *Nabonassar*, &c.

Of these, the most generally used, by reference to which all the rest are now regulated, is,

THE VULGAR CHRISTIAN ERA.

Unfortunately for ancient Chronology, there was no one fixed or universally established Era. Different countries reckoned by different eras, whose number is embarrassing, and their commencements not always easily to be adjusted or reconciled to each other; and it was not until A.D. 532, that the *Christian Era* was invented by *Dionysius Exiguus*, a *Scythian* by birth, and a *Roman* Abbot, who flourished in the reign of *Justinian*.

The motive which led him to introduce it, and the time of its introduction, are best explained by himself, in a letter to *Petronius*, a bishop.

"Because *St. Cyril* began the first year of his cycle [of 95 years] from the 153d of *Diocletian*, and ended the last in the 247th; we, beginning from the next year, the 248th, of that same tyrant, rather than prince, *were unwilling to connect with our Cycles the memory of an impious [prince] and persecutor; but chose rather to antedate the times of the years, from the incarnation of* OUR LORD JESUS CHRIST: to the end that *the commencement of our hope might be better known to us;* and that *the cause of man's restoration*, namely, OUR REDEEMER'S *passion, might appear with clearer evidence* *."

The era of *Diocletian*, which was chiefly used at that time, began with his reign A.D. 284; and therefore the new era of the *incarnation*, A.D. 284 + 248 = A.D. 532. *Strauchius*, and other

* Quia vero Sanctus *Cyrillus* primum cyclum ab anno *Diocletiani* 153 cœpit, et ultimum in 247 terminavit; Nos, a 248 anno ejusdem tyranni potius quam principis, inchoantes, *noluimus circulis nostris memoriam impii et persecutoris innectere: sed magis elegimus ab incarnatione* DOMINI NOSTRI JESU CHRISTI, *annorum tempora prænotare;* quatenus *exordium Spei nostræ notius nobis existeret*, et *causa reparationis humanæ*, id est, *passio* REDEMPTORIS NOSTRI *evidentiùs eluceret.* See the whole Letter, Petav. Tom. II. Append. p. 498.

Chronologers, I know not upon what grounds, date it A.D. 527, five years earlier.

How justly *Dionysius* abhorred *Diocletian's* memory, may appear from *Eusebius,* who relates, that in the first year of his reign, when *Diodorus* the Bishop was celebrating the Holy Communion with many other Christians in a cave, they were all immured in the earth, and buried alive! Hence, his era was otherwise called the Era of *the Martyrs;* and not from the tenth, last, and bloodiest of the Christian persecutions by the Roman Emperors, in the 19th year of his reign.

Dionysius began his era with the year of our Lord's *incarnation* and *nativity,* in U.C. 753, of the *Varronian* Computation, or the 45th of the *Julian* Era. And at an earlier period, *Panodorus,* an *Egyptian* monk, who flourished under the Emperor *Arcadius,* A.D. 395, had dated the incarnation in the same year.

But by some mistake, or misconception of his meaning, *Bede,* who lived in the next century after *Dionysius,* adopted his year of the Nativity, U.C. 753, yet began the *Vulgar Era,* which he first introduced, the year after, and made it commence Jan. 1, U.C. 754: which was an alteration for the worse, as making the *Christian Era* recede a year further from the true year of the *Nativity.*

The *Vulgar Era* began to prevail in the West about the time of *Charles Martel,* and Pope *Gregory* II. A.D. 730; but was not sanctioned by any public Acts or Rescripts, till the first *German* Synod, in the time of *Carolomannus,* Duke of the *Franks,* which, in the preface, was said to be assembled "*Anno ab incarnatione Dom.* 742, 11 Calendas Maii." But it was not established till the time of Pope *Eugenius* IV. A.D. 1431, who ordered this era to be used in the public Registers: according to *Mariana,* and others.

Dionysius was led to date the year of the Nativity, U.C. 753, from the Evangelist Luke's account that *John* the Baptist began his ministry "in the fifteenth year of the reign of *Tiberius Cæsar;*" and that JESUS at his baptism, "was *beginning to be about* 30 *years of age.*" Luke iii. 1—23. For *Tiberius* succeeded *Augustus* at his death, Aug. 19, U.C. 767; and therefore his fifteenth year was U.C. 782; from which, subtracting the assumed year of the nativity, U.C. 753, the remainder was 29 years complete, or 30 years current.

But this date of the nativity is at variance with Matthew's

account, that CHRIST was born before *Herod's* death; which followed shortly after his massacre of the infants at Bethlehem, Matt. ii. 1—19. And *Herod's* death was also shortly after the lunar eclipse of March 13, U.C. 750; between that and the passover, which fell that year on the 12th of April; as may be collected from *Josephus*, Ant. 17, cap. 6—8; Bell. Jud. 1, cap. 13, 4—8.

And that *Herod's* death is rightly assigned to the year U.C. 750, is confirmed from the duration of his reign: for *Josephus* states, that by the interest of *Anthony*, *Herod* was appointed king by the *Roman* Senate, "in the 184th Olympiad, when *Caius Domitius Calvinus*, the second time, and *Caius Asinius Pollio*, were consuls," U.C. 714. Antiq. 14, 14, 5. And that he was established in the kingdom by the death of his rival, *Antigonus*, who had been set up by the *Parthians;* "when *Marcus Agrippa* and *Caninius Gallus* were consuls," U.C. 717. Antiq. 14, 16, 4. And he adds, that Herod reigned 37 years from his first appointment, by the Senate, and 34 years from the death of *Antigonus*, Antiq. 17, 8, 1; and Bell. Jud. 1, 33, 8. Now, if we take these as current years, according to the usage of *Josephus* *, the death of Herod was U.C. 714+36=U.C. 717+33=U.C. 750, as before. Such a critical conformity of ***astronomical*** and ***historical*** evidence, both furnished by an author the most competent to procure genuine information, establishes both; and decides the question, that *Herod* could not have died later than the year U.C. 750; though *Lardner* professed himself "unable to determine" between that year, or U.C. 751. See his *Credibility*, Vol. I. Append. p. 428. Edit. 1788.

Christ's birth, therefore, could not have been earlier than U.C. 748, nor later than U.C. 749. And if we assume the latter year, as most conformable to the whole tenor of Sacred History, with *Chrysostom*, *Petavius*, *Prideaux*, *Playfair*, &c. this would give Christ's age at his baptism, about 34 years; contrary to *Luke's* account.

In order, therefore, to reconcile the two Evangelists together, in this most important point, which forms the basis of the whole scheme of *Gospel-Chronology*, either the 15th of *Tiberius* must

* Thus *Josephus*, in one passage, states that *Herod* died on the *fifth day* after the execution of his son *Antipater;* Ant. 17, 8, 1; in another, "*five days* after;" Bell. Jud. 1, 33. 8.

be antedated, or the age of Christ, at his baptism, enlarged; or perhaps both: for the 15th of *Tiberius*, reckoned from the death of *Augustus*, Aug. 19, U.C. 767, is indisputably fixed, by means of the great *Lunar* Eclipse, soon after, Sept. 27, U.C. 767, which contributed to quell the dangerous mutiny of the *Pannonian* Legions, on the death of *Augustus*, and to induce them to swear fidelity to *Tiberius*, recorded by *Tacitus*, Annal. 1, 28; and *Dio*, Lib. 57, p. 604.

But there were different computations of the reigns both of *Augustus* and *Tiberius*, in circulation. Some writers computed the reign of *Augustus* from the year of *Julius Cæsar's* death, U.C. 710; as *Josephus*, who reckons it 57 years, 6 months, and 2 days; Ant. 17, 2, 2; and Bell. Jud. 2, 9, 1. Some, from the year after, U.C. 711, the date of his first consulate, when he wanted but one day to complete his 20th year; and therefore reckoning his reign 56 years. Vell. Paterc. 2, 65. Others, 46 years, 4 months, and 1 day. Clem. Alex. Strom. 1, p. 339. Others, from the year of the battle of *Actium*, U.C. 723, reckoning it 44 years. Others, from the *Actian Era*, U.C. 724, commencing from the death of *Anthony* and *Cleopatra*, as *Ptolomy*, in his Canon, who dates it 43 years, and is followed by Clem. Alex. Strom. p. 339.

Some also reckoned the reign of *Tiberius* 26 years, 6 months, 19 days. Clem. Alex. Strom. 1. p. 339. Others, 22 years, 5 months, 3 days. *Joseph*. Ant. 18, 7, 10. And *Ptolomy*, in his Canon, 22 years; which is adopted by *Clemens Alexandrinus*. And the cause of this difference we learn from the testimony of the *Roman* and *Grecian* historians, *Velleius Paterculus*, (the contemporary of *Tiberius)* *Tacitus*, *Suetonius*, and *Dio Cassius*; who all agree, that *Tiberius* was admitted by *Augustus* "*colleague of the empire*," or partner in the government, and in "*the administration of* [*the imperial*] *provinces*," [among which was *Judea*,] and "*in the command of the armies*," two or three years before his death; either in U.C. 764, or more probably U.C. 765; and that this partnership was confirmed by a decree of the senate. But the 15th of *Tiberius*, reckoned from U.C. 765, would be U.C. 780; from which, subtracting the year of *Christ's* nativity, U.C. 749; the remainder, 31 years, more or less, sufficiently agrees with the latitude of the expression, "about 30 years of age."

This solution agrees with the other historical characters of *Luke*, iii. 1, 2.

1. "When *Pontius Pilate* was governor of *Judea.*"

After the death of *Herod* the Great, the *Jewish* nation, weary of his tyranny and cruelties, petitioned the Emperor *Augustus*, "that they might be permitted to live according to their own laws, under the *Roman* government." But the Emperor did not think proper, at that time, to comply with their wishes. In the mean time *Archelaus* assumed the government of *Judea*, according to his father's will, until it should be confirmed from Rome; and at the ensuing passover, April 12, slew above 3000 Jews in a tumult. At length, in the tenth year of his reign, the chiefs of the *Jews* and *Samaritans*, no longer brooking his tyranny, preferred an accusation against him to *Augustus;* who having heard both sides, deposed *Archelaus*, and banished him to *Vienne*, in *Gaul*, and confiscated his property; and thenceforth governed *Judea* by his procurators or commissaries. *Joseph.* Ant. 17. cap. 9—15.

The first Procurator was *Coponius*, appointed by the trusty *Cyrenius*, whom *Augustus* sent a second time, in quality of "Governor of *Syria*," U.C. 760, to transact these important affairs, and to levy the assessment of properties, or carry "*the taxing*" into effect; preparatory to which, he had made an "*Enrolment* of Persons," U.C. 749, at the time of Christ's birth, as the Emperor's procurator. Luke ii. 1—7. The second Procurator who succeeded *Coponius*, about two years, was *Marcus Ambivius*, about four years; then *Annius Rufus*, about one year; and *Valerius Gratus*, eleven years; who was succeeded by *Pontius Pilate*, to U.C. 760. Therefore the date of the appointment of *Coponius*, adding the amount of the several administrations, 18 years, will bring the appointment of *Pilate* to U.C. 778. The same year may be collected by a backward reckoning from the end of his government. *Pilate* continued ten years in the government of *Judea*, and was then deposed for the massacre of the *Samaritans*, some time before the passover of U.C. 789, which preceded the death of *Tiberius*, March 16, 790. Compare Ant. 18, 5, 2, 3; and Ant. 18, 6, 3. If then he was deposed about the end of U.C. 788, it would bring his appointment to U.C. 778*, as before; but this was the year before *John's* preaching; or in the fourteenth year of the joint reign of *Tiberius*.

* This is confirmed by *Eusebius*, who says that *Pilate* was made Procurator of *Judea* in the twelfth year of the reign of *Tiberius*, U.C. 767 + 11 = U.C. 778.

"*Pilate* therefore was undoubtedly Governor of *Judea* at the time of John the Baptist's ministry, and till after our Saviour's crucifixion." *Lardner*, Credib. Vol. I. p. 381.

2. "*Herod* [*Antipas*] being tetrarch of *Galilee*."

Augustus divided Herod the Great's dominions, at his death, into four tetrarchies: the first of *Judea*, was given to *Archelaus*, with the title of *Ethnarch*, and a promise of that of *King*, if he should deserve it by his good conduct. He was therefore considered as king by the *Jews*. Hence the expression βασιλευει, "*reigned*," was applied to him at his accession by the Evangelist, Matt. ii. 22. But the bad character he bore, and the divine warning, deterred the holy family from returning into *Judea*, after Herod's death, from *Egypt*; and induced them to settle again under the milder government of *Herod Antipas*, in *Galilee*, at *Nazareth*. Matt. ii. 19—23. This was the same *Herod* who married *Herodias*, his brother *Philip's* wife; and when rebuked for it by the Baptist, imprisoned, and at his wife's instigation, beheaded him. Mark vi. 17—23. To whom also CHRIST was sent to be examined by *Pilate*. Luke xxiii. 6, 7.

3. "His brother *Philip*, tetrarch of *Iturea*, and of the region of *Trachonitis*." *Josephus* informs us that "he died in the 20th year of *Tiberius* (U.C. 787) after he had governed *Trachonitis*, and *Batanea*, and *Gaulanitis*, 37 years." Ant. 18, 5, 6. This brings the beginning of his reign to U.C. 750; and therefore furnishes an additional argument, that *Herod's* death has been rightly assigned to that year.

When *Caligula* succeeded *Tiberius* in the empire, he gave *Philip's* dominions, which were vacant, to *Agrippa*, the brother of *Herodias*, with the title of *King*. But this wicked and ambitious woman, envying her brother's superior rank, urged and prevailed on her husband, against his will, to go to *Rome*, and solicit the same title from the Emperor; who, instead of granting his petition, having received some unfavourable information of his conduct, not only took away his government, and gave it to *Agrippa*; but also banished himself to *Lyons*, in *Gaul*, whither his wife and ill-adviser followed him: thus justly punished for her ambitious envy, and her husband for following her vain counsels, as *Josephus* observes, Ant. 18, cap. 7, 8.

4. "And *Lysanias*, tetrarch of *Abilene*."

This quarter of *Herod* the Great's dominions had originally belonged to a former *Lysanias*, who was put to death by *Anthony*,

during his government in the East; *Augustus* afterwards granted it to *Herod;* and on his death, restored it to a descendant of the former proprietor, of the same name. When *Caligula* appointed *Agrippa* king of the tetrarchy of *Philip*, he promised also to give him the tetrarchy of *Lysanias*, when it should be vacant; which was afterwards given to him, on the death of *Lysanias*, by the Emperor *Claudius;* who thus restored to *Agrippa* the whole of his grandfather *Herod's* dominions. Ant. 18, 7, 10; and 19, 5, 1; and Bell. Jud. 2, 11, 5.

This *Agrippa* was "*Herod* the *king*," who to court popularity with the Jews, persecuted the Apostles, and beheaded *James* the elder, the brother of *John;* and for his pride and arrogance, was smitten by an angel of the Lord, because he received the blasphemous adulation of the people, "*without giving* God *the glory*," and was devoured by worms; as recorded by the Evangelist, Acts xii. 1—23; and paraphrased by *Josephus*, Ant. 19, 8, 2. His son was "the king *Agrippa*," before whom *Paul* so powerfully pleaded his cause; Acts xxvi. 1—32.

5. "*Annas* and *Caiaphas* being high-priests."

Ananus, or *Annas*, was appointed High-Priest by *Quirinus*, or *Cyrenius*, when he was sent by *Augustus* to confiscate the property of *Archelaus*, U.C. 760, in the 37th year after the battle of *Actium*, U.C. 723. *Joseph*. Antiq. 18, 2, 1. *Ananus* continued in office about 14 years, until the administration of *Valerius Gratus*, the fifth governor of *Judea;* who deposed him about U.C. 774, and appointed *Ismael*, *Eleazar*, son of *Ananus*, and *Simon*, High Priests in succession, none of whom remained above a year in office. Near the end of his administration, he appointed *Joseph*, called *Caiaphas*, the son-in-law of *Ananus*, about U.C. 777; who therefore was High Priest during the whole of the administration of *Pilate;* for *Vitellius*, his successor, removed *Caiaphas* about the passover of U.C. 789, and appointed *Jonathan*, another son of *Ananus*, High Priest in his room. *Joseph*. Ant. 18, 2, 2, and 18, 5, 3. *Annas*, therefore, was the coadjutor of *Caiaphas*, the reigning High Priest at this time: and on account of his age, rank, and consequence, as a man of the first consideration and influence in the state, is named first: for as such, he is represented by *Josephus*. "The elder *Ananus* was counted one of the most fortunate of men; for he had five sons; and it so happened, that they all ministered to God in the high priesthood; after he had himself formerly enjoyed that

honour for a long time: which happened to none of our High Priests." Ant. 20, 8, 1. To this, we may attribute the taking JESUS, when he was apprehended, "first to the house of *Annas*;" who "sent him bound to *Caiaphas*, the High Priest." John xviii. 13—24; Matt. xxvi. 57.

And it was usual with the High Priests at this time to have a senior, who had discharged that office as coadjutor. Thus *Josephus* relates, that on account of a disturbance between the Jews and Samaritans, *Quadratus*, the President of *Syria*, sent two of the most powerful men of the Jews, and the *High-Priests*, *Jonathan* and *Ananias* *, &c. and also some of the most distinguished of the *Samaritans*, to *Claudius Cæsar*, to answer for the conduct of their nations. Bell. Jud. 2, 12, 6.

From this historical review, it appears how intimately acquainted the Evangelist *Luke* was with the affairs of *Judea*, the neighbouring states, and the *Romans*. He spent some time himself at *Rome*, and could not have been ignorant of the various modes of computing the reigns of their Emperors: and that he did not reckon the fifteenth year of *Tiberius* from the death of *Augustus*, is demonstrated by the opinion of several early Christians, *Tertullian*, *Africanus*, *Lactantius*, &c. that the crucifixion of CHRIST happened in the fifteenth year of *Tiberius*, when the two *Gemini* were consuls, U. C. 782, or A. D. 29, evidently reckoning from the sole empire of *Tiberius*. But it is impossible that *Luke* could have referred a transaction so early as *John's* ministry, to the same date, understood in the same sense. This argument appears to be decisive; especially if we consider, that their opinion was incorrect, and retrenched two years from the most probable date of the crucifixion, U. C. 784, or A. D. 31. which would throw back the date of *John*'s baptism still earlier.

This solution, of dating the 15th of *Tiberius* from his joint reign with *Augustus*, U. C. 765, has been adopted in the margin of our English Bible, dating the 15th of *Tiberius* A. D. 26, or U. C. 779, and either U. C. 764, or U. C. 765, are reckoned the beginning of the joint reign of *Tiberius*, by *Usher*, *Pagius*, *Herwaert*, *Clericus*, *Prideaux*, *Mann*, *Playfair*, &c.

* *Jonathan* was an excellent character: when the high priesthood was offered to him a second time, he declined it, and recommended another brother of his, as worthier than himself. By his interest at the *Roman* court, he contributed to get *Felix* made governor of *Judea*: who, in return for it, and for his wholesome admonitions, got him assassinated!—*Ananias*, the High-Priest, was he who insulted *Paul* on his trial. Acts xxiii. 2, 3.

DAY OF THE NATIVITY.

The vulgar day of our Lord's nativity, *December* 25, though an early tradition, as appears from the *Apostolical Constitutions*, Lib. 5, cap. 13, p. 312, Edit. *Coteler.* was not established till the time of the Emperor *Constantine*, who died A. D. 337, when it was enacted, probably about the Council of *Nice*, A. D. 325, by the *Roman* Church, and adopted by the *Greek* Church ten years after, at *Constantinople;* according to *Chrysostom*, in his homily on the *day of the nativity:* and at that time it was separated from the *Epiphany*, held on the 6th of *January:* whereas the *Greek* Church had heretofore celebrated the *Nativity* and the *Epiphany* on the same day, supposing, as was natural, that the birth of CHRIST, and the first appearance of the *Star*, happened on the same day. But the Church of *Rome* separated them, under the pretext, that "*the second appearance* of the Star to the *Magi* in the way to *Bethlehem, was holier than the first*:* but in reality to multiply holidays. This occasioned great discontents at *Constantinople*, when introduced there by *Gregory, the Theologian*, from *Rome*, the citizens murmuring at the separation, and saying to him, *You have divided the feast, and involved us in polytheism* † *!*"—An early objection against the Church of *Rome.*

How injudiciously the 25th of *December* was fixed, may appear from comparison of the two days.

The 6th of January having been the established day of the feast of the *Epiphany*, the *Romanists* did not venture to alter that, but they fixed the day of the nativity a fortnight earlier, supposing that interval sufficient for the *Magi* to come from the neighbouring country of *Arabia Felix*, which was imagined then (and is still by some commentators, *Grotius*, &c.) to have been their native country, from some passages in the Psalms, "The kings of *Seba* and *Saba* shall bring gifts [to CHRIST."] —"To him shall be given of the gold of *Seba*." Ps. lxxii. 10—15, &c. Forgetting all the while that their visit to *Bethlehem* must have been *after* the *purification* of his mother, and

* In the *Ordo Romanus*, and also in the book *De divinis officiis*, it is observed: Nec prætereundum est, quod *hæc secunda Nativitas Christi, tot illustrata mysteriis, honoratior sit quam prima.*

† Λεγοντες, ὁτι ετεμες την ἑορτην, και εις πολυθειαν ἡμας ενεβαλες. *Patres Apostolici, Cotelerius*, Tom. I. p. 313.

his *presentation* in the temple, *forty* days after his birth, (Luke ii. 22—27; Levit. xii. 2—8.) which evidently was *prior* to the flight of the holy family to *Egypt;* and also, that the *Magi* were the established priesthood of the *Persian* empire, from the earliest times, and therefore, that even forty days would be too short for their journey from that distant country.

The true cause of their fixing on the 25th of *December*, is thus perhaps best explained by Sir *Isaac Newton*.

"The times of the *birth* and *passion* of CHRIST, with such like niceties, being not material to religion, were little regarded by the *Christians* of the first age. They who began first to celebrate them, placed them in the *cardinal points* of the year; as the *Annunciation* of the Virgin *Mary*, on the 25th of *March*, which, when *Julius Cæsar* corrected the calendar, was the *Vernal equinox;* the feast of *John* the Baptist on the 24th of *June*, which was the *Summer solstice;* the feast of St. *Michael* on September 29th, which was the *Autumnal equinox;* and the *birth of* CHRIST on the *Winter solstice*, December 25th; with the feasts of St. *Stephen*, St. *John*, and the *Innocents*, as near it as they could place them; and because the *solstice*, in time, removed from the 25th of *December* to the 24th, the 23d, and the 22d, and so on backwards, hence some, in the following centuries, placed the birth of CHRIST on *December* 23d, and at length on *December* 20; and for the same reason, they seem to have set the feast of St. *Thomas* on *December* 21, and that of St. *Matthew* on *September* 21.

"So also, at the entrance of the sun into all the signs of the *Julian* calendar, they placed the days of other saints: as the *Conversion of Paul*, on *January* 25, when the sun entered *Aquarius;* St. *Matthias*, on *February* 25, when he entered *Pisces;* St. *Mark*, on *April* 25, when he entered *Taurus; Corpus Christi*, on *May* 26, when he entered *Gemini;* St. *James*, on *July* 25, when he entered *Cancer;* St. *Bartholomew*, on *August* 24, when he entered *Virgo; Simon* and *Jude*, on *October* 28, when he entered *Scorpio;* and if there were any other remarkable days in the *Julian* calendar, they placed the saints upon them: as St. *Barnabas* on *June* 11, where *Ovid* seems to place the feast of *Vesta* and *Fortuna*, and the goddess *Matuta;* and St. *Philip* and St. *James*, on the first of *May*, a day dedicated both to the *Bona Dea*, or *Magna Mater*, and to the goddess *Flora*, and still celebrated with her rites.

"All which shews that these days were first fixed in the *Christian* Churches by *mathematicians at pleasure*, without any ground in *tradition;* and that the *Christians* afterwards took up with what they found in the *calendars.*" *Prophecies of Daniel*, chap. ii. Part I. p. 144.

Hospinian, a learned *German* antiquary, is of opinion that the Christians at *Rome* did not celebrate the 25th of *December*, as thinking CHRIST was then born, but to make amends for the Heathen *Saturnalia;* which was a season of great festivity, beginning on December 16, and lasting three days, but usually prolonged to the end of the week, on acount of the succeeding feast of the *Sigillarii*. *Macrob.* Saturnal. lib. i. cap. 10. And indeed the crowding together so many holydays, near the end of December, as we find in the calendar, strongly confirms this opinion.

To determine the true day of CHRIST'S birth, as *Scaliger* says, *belongs to God alone, not man* *. Of all the various conjectures that have been proposed, the most probable are, either 1. that "Christ, our *Passover*," was born about the time of the *vernal equinox*, when the *Passover* was celebrated, or 2. about the *autumnal equinox*, at the celebration of the feast of *tabernacles*, when "the WORD became flesh, and (εσκηνωσεν) *tabernacled* among us, (John i. 14.) or 3. on the great day of *atonement*, the 10th day of the seventh month, as "a *faithful high-priest*, in things pertaining to GOD, to *make atonement* for the sins of the people [of *Israel*,"] Heb. ii. 17. "to be *himself a propitiation* for *our sins;* and not for our's only, but also for *those* of *the whole world.*" 1 John ii. 2. And if this last (adopted by Primate *Usher*) be preferred, it gives a peculiar emphasis to the declaration of the angel to the shepherds on the night of the nativity:—"*Fear not*, for lo, I bring you *glad tidings of great joy*, which shall be unto *all the people* [of *Israel:*] for unto you is born *this day* a SAVIOUR, who is CHRIST THE LORD.—*Glory to* GOD in the highest, and on earth, *peace, good-will towards men.*" Luke ii. 10—14.

And indeed either of these two last epochs agrees better than the first with the prevailing traditions of the duration of

* Diem vero definire, *unius* DEI *est, non hominis.*

THE MINISTRY OF CHRIST.

The apostolical father, *Ignatius*, a disciple of *John* the Evangelist, and bishop of *Antioch*, the second in succession from *Peter*, who suffered martyrdom in the reign of *Trajan*, A. D. 107, in his epistle to the *Trallians*, gives the following curious and valuable testimony; *Cotelerius, Patres Apostol.* tom. ii. p. 68.

"GOD THE WORD——having lived in the world *three decads of years*, was baptized by *John* truly, and not seemingly; and having preached the Gospel *three years*, and wrought signs and wonders; he, the Judge, was judged by the *false Jews* and *Pilate;* was scourged, smitten on the cheek, spit upon, wore a crown of thorns and a purple robe, was condemned, was crucified, truly, not seemingly, nor in appearance, nor by deception; he died truly, and was buried, and was raised from the dead," &c.

And this is confirmed by the testimony of *Eusebius*, the learned Bishop of *Cesarea*, who flourished about A. D. 300, in his *Demonstratio Evangelica*, p. 400.

"It is recorded in history, that the whole time of OUR SAVIOUR'S teaching and working miracles was *three years and a half*, which is *the half of a week* [of years.] This John the Evangelist will represent to those who critically attend to his Gospel. One week of years, then, may be reckoned the whole time of his continuance with his Apostles, both before his passion, and after his resurrection from the dead: for it is written, that until his passion, he shewed himself to all, disciples and not disciples; during which time, by his doctrines and extraordinary cures, he shewed the powers of his GODHEAD to all without distinction, both *Greeks* and *Jews;* and also after his resurrection from the dead, he was with his disciples and apostles, as it is reasonable to think, an equal number of years; '*being seen of them forty days, and conversing with them, and telling them the things pertaining to the kingdom of God*,' as contained in the *Acts of the Apostles*. So that this is the '*one week of years*,' signified by the prophecy [of *the seventy weeks* in *Daniel*] during which '*he confirmed the covenant with many;*' namely, by strengthening the new covenant of the Gospel-preaching. And who were *the many* with whom he confirmed it? Plainly his *disciples* and *apostles*, and all those of the *Hebrews* that believed on him. Moreover, '*in the half of this one week*,' in which he confirmed the covenant disclosed to the

many, '*was the sacrifice taken away*,' and the libation, and '*the abomination of desolation*' began; since, in the midst of this week, after the three years and half of his teaching, at the time of his passion, '*the vail of the temple was rent from top to bottom;*' so that from that time, the libation and the sacrifice was *virtually* taken away from them, and the abomination of desolation began to take place in the temple, that tutelary power which watched over and guarded the [holy] place from the beginning to that season, leaving them desolate."

These two admirable passages, which I have given at length, in order to render justice not only to the piety, but to the critical knowledge of the *facts*, the *mysteries*, and the *prophecies* of holy writ, which they display, by their consistency and harmony with each other, not only establish the authenticity of the former, which has been reckoned among the interpolated epistles of the venerable *Ignatius*, but the latter especially, furnishes the best clue, perhaps, any where to be found, to the whole scheme of the Gospel dispensation, as being the consummation of ancient prophecy, no less in its precise period of *time*, than in every other respect. They are indeed a host against all the discordant and absurd *guesses*, ancient or modern, about the longer or shorter duration of our Lord's ministry, which, to compare together, bring with them their own refutation. I shall not therefore waste the reader's patience, nor trespass on the limits of this *apparatus* by retailing them, in order to be rejected afterwards.

Ignatius and *Eusebius* both assign *three years* for the duration of our Lord's public ministry; the latter mentions an additional *half year*, from his baptism to its commencement, during which our Lord was employed in privately selecting and preparing his disciples. And a critical inspection of the *Gospels*, especially of *John's*, (recommended by *Eusebius*) will furnish internal evidence, the most solid and satisfactory, of the correctness of this period; by distinguishing *the four passovers* which included our Lord's public ministry, and arranging them chronologically, according to the foregoing principles:

TABLE X. GOSPEL CHRONOLOGY.

Event	U.C.	B.C.
John the Baptist born, about Spring. Luke i. 57—80	749	5
Augustus decrees an enrollment, in *Herod's* dominions. Luke ii. 1.		
The *enrollment* made by *Cyrenius*, in Summer. Luke ii. 3		
JESUS CHRIST born, about Autumn. Luke ii. 4—7		
——— presented in the Temple. Luke ii. 27		
Visit of the Persian *Magi*, about February. Matt. ii. 1—12	750	4
Flight of the Holy Family to *Egypt*. Matt. ii. 13—14		
Massacre at Bethlehem. Matt. ii. 16		
Death of *Herod*, about Spring. Matt. ii. 19		
Archelaus, Ethnarch of *Judea*. Matt. ii. 22		
Passover, April 12		
	U.C.	**A.D.**
Archelaus deposed, and *Judea* made a *Roman* province	760	7
The assessment, or "*taxing*, made by *Cyrenius*, then Governor of *Syria*." Luke ii. 2		
Ananus, or *Annas*, made high-priest		
Coponius, first Procurator of *Judea*		
CHRIST'S first visit to the Temple, in his 12th year. Luke ii. 42—50	761	8
Marcus Ambivius II. Procurator	762	9
Tiberius, joint emperor with *Augustus*	765	12
Annius Rufus III. Procurator	766	13
The death of *Augustus*, August 19	767	14
Valerius Gratus IV. Procurator. 11 years		
Ismael, High-priest	774	21
Eleazar, son of *Annas*, High-priest	775	22
Simon, son of *Camith*, High priest	776	23
Joseph Caiaphas, High-priest, 11 years	777	24
Pontius Pilate V. Procurator, 10 years	778	25
John Baptist begins his ministry "in the 15th year of *Tiberius*." Luke iii. 1—18; Matt. iii. 1—12; Mark i. 4—8; John i. 19—28	779	26

	U.C.	A.D.
CHRIST baptized, "about 30 years of age," near Autumn. Luke iii. 21—23; Matt. iii. 13—17; Mark i. 9—11; John i. 32—34 .... His temptation 40 days in the wilderness. Matt. iv. 1—11; Mark i. 12, 13; Luke iv. 1—13 .... Chooses disciples. John i. 37—52 .... His first miracle at *Cana*. John ii. 1—11	780	27
I. *Passover*. CHRIST visits and purges the temple. John ii. 13—23 .... *John Baptist* imprisoned by *Herod*. Matt. iv. 12; Mark i. 14; Luke iii. 20; John iii. 24 .... CHRIST begins his public ministry. Matt. iv. 17—25; Mark i. 14, 15; Luke iv. 14, 15; John iv. 3. His sermon on the mount. Matt. v. vi. vii.	781	28
II. *Passover*. John v. 1—47; (compare iii. 22; iv. 45.) Matt. xii.; Mark ii. 23—28; iii. 1—6; Luke vi. 1—11 .... He chooses and sends forth the 12 Apostles to preach. Matt. x. 1—42; Mark iii. 13—19; vi. 7, Luke vi. 13—49; ix. 1—6 .... *John the Baptist* sends to enquire of CHRIST. Matt. xi. 3 .... *John the Baptist* beheaded by *Herod*. Matt. xiv. 10; Mark vi. 28, Luke ix. 9. August 29*.	782	29
CHRIST feeds the 5000 in the wilderness. Matt. xiv. 15—23; Mark vi. 35—44; Luke ix. 11—17; John vi. 5—15 .... III. *Passover*. John vi. 4 .... He sends forth the 70 disciples to preach. Luke x. 1—24 .... His transfiguration on Mount *Tabor*. Matt. xvii. 1—9; Mark ix. 2—8; Luke ix. 28—36; John i. 14; 2 Pet. i. 16—18 .... He gives sight to a man born blind. John ix. .... The feast of the *Dedication*, in Winter. John x. 22.	783	30

* Festum decollationis *Johannis Baptistæ*, Romani Augusti 29, constanter celebrant. *Petav.* tom. i. p. 172.

	U.C.	A.D.
He raises *Lazarus* from the dead. John xi.		
He enters *Jerusalem* in triumph. Matt. xxi. 8—11; Mark xi. 8—11; Luke xix. 37—40; John xii. 12—18		
He visits and purges the Temple a second time. Matt. xxi. 12, 13; Mark xi. 15—17; Luke xix. 45, 46.		
He declares the Temple "*desolate.*" Matt. xxiii. 38; and foretells "*the abomination of desolation.*" Matt. xxiv. 2—16; Mark xiii. 2—14; Luke xxi. 6—20		
He celebrates the *Passover* with his disciples, and institutes the *Lord's Supper.* Matt. xxvi. 17—29; Mark xiv. 12—25; Luke xxii. 7—10		
He is betrayed and apprehended by *Judas*, and tried by the *chief priests.* Matt. xxvi. 47—75; Mark xiv. 43—72; Luke xxii. 47—71; John xviii. 1—27	784	31
IV. *Passover*, March 27. He is condemned by *Pilate*, and crucified. Matt. xxvii.; Mark xv.; Luke xxiii.; John xviii. 28—40; xix.		
The *Resurrection.* Matt. xxviii. 1—6; Mark xvi. 1—6; Luke xxiv. 1—6; John xix. 1—9		
Sundry appearances of OUR LORD to his disciples during 40 days. Acts i. 3, &c.		
The *Ascension.* Mark xvi. 19; Luke xiv. 51; Acts i. 9.		
Whitsunday. Amazing effusion of the HOLY SPIRIT upon the apostles and disciples; and first-fruits of the Church of CHRIST, about 3000 souls. Acts ii. 1—41		
The Church encreased to 5000. Acts iv. 4		
The disciples strengthened by a second effusion of the HOLY SPIRIT. Acts iv. 31	785	32
Miraculous punishment of *Ananias* and *Sapphira*, for "lying unto GOD." Acts v.		
The disciples multiply, both *Greeks* and *Jews*, and seven deacons appointed. Acts vi. 1—7		
A great *crowd* (οχλος) of *the priests* converted. Acts vi. 7	786	33

	U.C.	A.D.
Powerful preaching of *Stephen*. Acts vi. 8—15 .... His trial. Acts vii. 54 ... CHRIST appears to him. Acts vii. 55, 56 ... His martyrdom, about Autumn. Acts vii. 57—60; viii. 2 First persecution of the Church at *Jerusalem*, and dispersion of the disciples through *Judea* and *Samaria*, which contributed to the encrease of the Church. Acts viii. 1—40...	787	34

In this general outline, I have annexed the leading occurrences after our Lord's ascension, during the remaining *three years and a half* of the Passion Week, ending with the martyrdom of *Stephen*, which our *Bible Chronology*, *Usher*, and *Pearson*, all date A.D. 34.

The simplicity and uniformity of the whole, and the consistency and harmony of the several parts, with the accounts of the *Sacred*, *Jewish*, and *Roman historians*, all carefully compared together, and verified by *eclipses*, will, I trust, confirm the solidity of the principles upon which this Table is constructed; and tend to remove much of the confusion, perplexity, and embarrassment, in which this most obscure and difficult, perhaps, but unquestionably, most important and interesting period of *our Lord's Ministry* has been hitherto involved by almost every new *Harmonist*, patching and mending the work of his predecessors.

Nor will the most prejudiced and attached advocate of the *Vulgar Bible Chronology* have any just cause to complain of this arrangement, which leaves him still in full possession of the established dates of the beginning of the Passion Week of Years, A.D. 27, and the ending, A.D. 34. It also retains the four passovers during three full years, and only reverses the antecedent and subsequent spaces, by shifting backwards the year of crucifixion from A.D. 33, which was assumed on no earlier authority than that of *Roger Bacon*, in the 13th century *, to A.D. 31, in

* *Roger Bacon* found by computation, that the Paschal full moon, A.D. 33, fell on *Friday*; and this circumstance led him, and several others, *Scaliger*, *Usher*, *Pearson*, &c. to conclude, that this was the year of the crucifixion. But admitting the computation to be exact, as afterwards verified by *Scaliger*, *Newton*, *Mann*, and *Lamy*, (see *Bowyer's Conjectures* * *on the New Testament*, John vi. 4, p. 149.) this very circum-

* The number 4, assigned to *Bacon's* computation of the day of the Paschal full moon, is incorrect: it should be 6, or *Friday*.

the consulship of *Tiberius* and *Sejanus*, as supported by the respectable testimony of *Aurelius Cassiodorus*, in the sixth century, noticed before. This reduces the interval from our Lord's baptism, about Autumn, A.D. 27, to the first Passover, A.D. 28, to half a year; while it lengthens the interval from the crucifixion, in Spring, A.D. 31, to the martyrdom of *Stephen*, about Autumn, in A.D. 34, to three years and half: both surely with greater conformity to the Gospel history, which includes a much greater number of events in the latter interval than in the former.

Eusebius dates the first half of the Passion Week of Years as beginning with our Lord's baptism, and ending with his crucifixion. The same period precisely is recorded by *Peter*, as including the duration of our Lord's *personal* ministry: "All the time that the LORD JESUS went in and out among us, beginning from the baptism of [or by] *John*, until the day that he was taken up from us," at his *ascension*, which was only 43 days after the crucifixion. Acts i. 21, 22. And the remaining half of the Passion Week ended with the martyrdom of *Stephen*, in the seventh or last year of the week. For it is remarkable, that the year after, A.D. 35, began a new Era in the Church, namely, the Conversion of *Saul*, or *Paul*, the Apostle, by the personal appearance of CHRIST to him on the road to *Damascus*, when he received his mission to the *Gentiles*, after the *Jewish* Sanhedrim had formally rejected CHRIST by persecuting his disciples. Acts ix. 1—18. And the remainder of the Acts principally records the circumstances of his mission to the Gentiles, and the Churches he founded among them.

The *Bible Chronology*, however, is more correct than *Usher's*, (from which it was taken, with some alterations, by Bishop *Lloyd)* in dating the beginning of *John's* baptism, A.D. 26, a year earlier than *Usher*, who dates it A.D. 27, the same year that he assigns to the baptizing of CHRIST, about six months after; which is certainly too short a space for the work of *John's*

stance proves that it was not the year of the *crucifixion;* for the true Paschal full moon was the day before, *Thursday*, when CHRIST celebrated the Passover with his disciples. Besides, *Dodwell* and *Ferguson* give different results in their calculations, the former reckoning *Saturday*, the latter *Tuesday*, to be the day of the Paschal full moon, A.D. 33. Little stress, therefore, is to be laid on such calculations, respecting which *Petavius* remarked: "Desinant itaque chronologi in anno dieque passionis eruendo, mathematicorum calculis ac noviluniorum pleniluniorumque minutis et scrupulosis ratiociniis, sibi ac lectoribus suis negotium facere. Quo in genere, nimia sane περιεργεια quorundam extitit." *Petav.* Vol. II. p. 235.

ministry. For *John* made a great number of "*disciples*," and "*all the people*," came to his baptism, far and near, (Luke iii. 21.) which could not have required less than a year at least, if not two; nor is it likely that he would sooner have attracted the notice of the *Sanhedrim* at Jerusalem. It was not till his fame was generally spread, that they sent a solemn deputation of Priests and Levites to him, to enquire who he was.

After this explanation of the *Vulgar Christian Era*, and the important articles connected therewith, we shall proceed to consider the principal Eras of Sacred and Profane Chronology that most frequently occur, reduced to the Christian Era in the following Table:—

TABLE XI. REMARKABLE ERAS.

	B.C.
Creation of the World	5411
Julian Period (January 1.)	4714
Deluge	3155
Cali yuga, Indian era of the Deluge	3102
Dispersion of mankind	2614
Nimrod reigns in *Assyria*	2554
Menes reigns in *Egypt*	2412
Tcheou, or division of the *Chinese* empire into twelve provinces	2277
Abraham born	2153
Settlement of the *Israelites* in *Egypt*	1863
Exode of the *Israelites* from *Egypt*	1648
Cecrops reigns at *Athens*	1558
Sesostris reigns in *Egypt*	1308
Destruction of *Troy*	1183
Foundation of *Solomon's* Temple	1027
Era of *Iphitus* (July 1.)	884
Era of the *Olympiads* (July 19.)	776
Foundation of *Rome* (April 21.)	753
Era of *Nabonassar* (February 26.)	747
Era of *Seleucidæ*, or *Alexander's* successors (October 1.)	312
Era *Cæsarea*, at *Antioch* (September 1.)	49
Era *Juliana* (January 1.)	46
Era *Hispanica* (January 1.)	38
Vict. *Actiaca* (August 29.)	30

		A.D.
Vulgar *Christian* Era (January 1.)		1
Cycle of the Sun	10	
——— Moon	2	
——— Indiction	4	
Dominical Letter	B	
First year after Bissextile.		
Era of *Diocletian*, or of *Martyrs* (September 17.)		284
Hegira, or flight of *Mahomet* (July 16.)		622
Era of *Yezdegird* (June 16.)		632
Era *Gelalæa* (March 14.)		1074
Era of the REFORMATION		
England (Wickliffe)		1360
Bohemia (Huss)		1405
Germany (Luther)		1517
Switzerland (Zuinglius)		1519
Denmark		1521
France (Calvin)		1529
PROTESTANTS first so called		
Sweden (Petri)		1530
Ireland (Brown)		1535
England completed *(Cranmer, Bucer, Fagius,* &c.)		1547
Scotland (Knox)		1560
Netherlands		1566

ARUNDEL MARBLES.

These celebrated marbles, with many other relics of antiquity, were purchased in *Asia Minor*, in *Greece*, or in the islands of the Archipelago, by Mr. *William Petty*, a skilful and indefatigable antiquary *, employed by *Thomas*, Earl of *Arundel*, in the

* The competence and qualifications of Mr. *Petty*, for antiquarian researches, justifying the choice of his munificent employer, are recorded by the editors of the marbles, *Selden*, *Chandler*, &c. and also by Sir *Thomas Roe*, in his *Negociations*, who was ambassador at Constantinople from the year 1621 to 1628.

Selden, who was not apt to flatter, represents him as "a man of the greatest judgment and discernment, and no less distinguished for his learning;" and Dr. *Chandler* styles him, "hominem judicio doctrinâque clarum, et summopere prudentem."

Sir *Thomas Roe*, in his correspondence with the Earl of *Arundel*, on the subject of ancient manuscripts, coins, statues, and inscriptions, repeatedly mentions him with great respect and approbation.

In a letter from Constantinople, dated January 20—30, 1624, Sir *Thomas* acknowledges the receipt of three letters from his Lordship, in recommendation of Mr. *Petty*,

year 1624, for the purpose of making such collections for him in the East. They were brought into England about the beginning

and doubts, "that he will find little worthy of his pains in those rude parts, where barbarism has trodden out all worthy reliques of antiquity." P. 334.

In the next letter, dated October 20—30, 1625, he says, "Mr. *Petty* hath visited *Pergamo, Samos, Ephesus,* and some other places, where hee hath made your Lordship greate provisions, *though hee lately wrote to mee he had found nothing worth.*" This indicates both his industry and his discernment.

In a subsequent letter, dated March 28, 1626, O. S. he says, "My last letters brought your Lordship the advice of Mr. *Pettye's* shipwracke and losses, upon the coast of *Asya,* returning from *Samos*. . . . . *Although hee will not boast to mee, yet I am informed he hath gotten many things rare and ancient.* There was never man so fitted to an employment; that encounters all accidents with so unwearied patience, eats with Greekes on their worst days, lies with fishermen on plancks at the best, is *all things to all men,* that he may obteyne his ends, which are your Lordship's service. He is gone to *Athens,* whither also I have sent." P. 470.

In a letter to the Duke of *Buckingham,* dated Constantinople, November 5—15, 1626, he says, "Mr. *Petty* has raked together 200 pieces, all broken, or few entyre; *what they will prove, I cannot judge.* He hath this advantage, that *hee went himself into all the islands, and took all he saw;* and is now gone to *Athens,* where I have had an agent nine months."

And in a subsequent letter to the same, dated April 15, 1628, he says, "I could have *laden shippes* with such stones as Mr. *Petty* diggs, but good things *undefaced* are rare, or rather not to be found. *Our search hath made many poore men industrious to rippe up old ruins.*" P. 808. Here Sir *Thomas* seems to prize no "good things," but such as were "entire." Mr. *Petty* had more discernment, and amidst a mass of rubbish, selected such fragments as appeared to him "rare and ancient;" though "what they would prove, he could not fully judge," at that time, any more than the ambassador.

Except these extracts, a few trifling anecdotes, scattered through the different writers on the Arundel marbles, and one manuscript letter in the British Museum, which states, that *Petty* was commissioned by King *Charles* I. to purchase a collection of pictures; Mr. *Hewlet,* the latest writer on this subject, could find no memoirs of this extraordinary person, to whom literature is so much indebted.

The foregoing passages of Sir *Thomas Roe's* letters, tend to invalidate the prevailing opinion, first broached by *Gassendi,* in his life of the celebrated *Peiresc,* (that learned and munificent patron of literature, who was counsellor in the Parliament of Provence, and died in 1637,) namely, that "the *Parian Chronicle* had first been discovered by means of *Peiresc,* and purchased for him by one *Sampson,* his agent, at *Smyrna,* for 50 pieces of gold *(aureis),* but that when they were ready to be sent on board, by some artifice of the venders, *Sampson* was thrown into prison, and the marbles themselves deranged, or thrown into disorder *(distracta),* and that afterwards they were purchased for Lord *Arundel,* by Mr. *Petty,* at a far greater price, *(pretio longe majori.)*"

This report, unnoticed by Sir *Thomas Roe* and *Petty,* seems vague and improbable in itself; for 1. *Gassendi* evidently confounded the *Parian Chronicle,* which was engraved on a single tablet, with the whole collection. 2. It appears, that the collection of the Arundel marbles was made by *Petty* himself, in detached pieces, during his progress through Asia Minor, the Islands, and Greece; and that the *Chronicle* was not found till near the end, and probably at the island of *Paros,* according to the opinion of the generality of writers, *Du Pin, Du Fresnoy, Rawlinson,* &c. grounded on the evidence of the Chronicle itself, which seems to have been engraved at *Paros* for the author's and his

of the year 1627, and placed in the gardens belonging to Arundel House, in the Strand, London.

On their arrival, they excited a lively curiosity, and were viewed by many inquisitive and learned men; among others, by Sir *Robert Cotton* *, who went immediately to that profound

countrymen's use; for if elsewhere, why should *Astyanax* be noticed as Archon, at Paros, in the year that it was made?

It is not probable, indeed, that even Mr. *Petty* exactly knew the contents of the *Marmor Chronicon*, for it is not distinguished by any particular appellation in Sir *Thomas Roe's* correspondence, though included under the general description of "things rare and ancient." We might also reasonably form this conclusion from *Selden's* account of the great difficulty he found in decyphering it, which he represents as the labour of a *great many days*. "It is more obscure," says he, "than the *Smyrnean* league, the characters being *often entirely obliterated, often nearly so*, (elementis *sæpius omnino detritis, fugientibus sæpius*.) Nevertheless, by the assistance of glasses, and the critical sagacity of my very kind friend, *Patrick Young*, after a great many repeated trials, I have restored them *as well as I could*." After all this labour, much was left for the industry and skill of future editors to explore; and even since the labours of a *Chandler*, the subject is not yet exhausted, nor the *lacunæ* fully and satisfactorily supplied by *conjectural* criticism.

These observations seem abundantly sufficient to establish both the *authenticity* and *antiquity* of the *Parian Chronicle*. No doubts of either were entertained at the time of the discovery of this precious fragment, nor long after, by those who were most competent to judge correctly, *Selden*, *Prideaux*, *Maittaire*, &c. until an ingenious classical sceptic, Rev. *J. Robinson*, ventured to call them in question, in a *Dissertation on the Parian Chronicle*, 1788, octavo. But his hypothesis refutes itself: he admits, that "this *curious*, *learned*, and *comprehensive* system of chronology, including a detail of the principal epochas and transactions of Greece, and other countries, of *Athens*, *Corinth*, *Macedon*, *Lydia*, *Crete*, *Cyprus*, *Sicily*, *Persia*, &c. during a period of 1300 years and upwards, must have been engraved at a *considerable expense* on a tablet of marble;" and yet he rather inconsistently supposes, "that it might have been a spurious fabrication of some learned Greek, so late as the 16th century, executed from a mercenary motive of gain, in order that it might be sold for a high price at *Smyrna*, a commodious emporium for such rarities, after he had artfully broken the block, and defaced the inscription in several places, to give it an air of antiquity!!" The weakness and inconsistency of his arguments throughout are ably exposed by the learned Mr. *Hewlett*, in a *Vindication of the Authenticity of the Parian Chronicle*, 8vo. which came out in the following year, 1789.

* *Selden* happily expresses the eager and impatient curiosity with which these precious reliques were viewed by the learned on their arrival in London.

Cum primum inviserat ea vir præstantissimus *Robertus Cottonus*, condus ille et promus vetustatis longe locupletissimus, *ad me advolat, et impensius* instat, ut mane proximo, (nam *provectior nox erat)* ad Græca illa arcana me totum accingerem. *Libentissime annuo.* Sed ut expeditius res absolveretur, rogo ut in operæ societatem, adsciscerentur amici communes, eruditissimus *Patricius Junius*, bibliothecarius regius, et multijugæ doctrinæ et studii indefatigabilis vir *Ricardus Jamesius*. Utrique condicit ille. *Illucescente* die crastino, convenimus triumviri in hortis *Arundelianis*, ubi Smyrnæorum decreta, et fœdus ab iis cum *Magnesiis*, ad *Seleuci Callinici* Asiæ regis majestatem tutius conservandam percussum, in stelâ variatim disruptâ, primo comperimus. Fragmenta suis locis commissa longitudinem 8 pedum et 2 pollicum; latitudinem pedum 3, poll. 5; crassitiem pollicum 8, continent. Scriptura autem, cujus lineæ utramque oram contin-

scholar and antiquary, *Selden*, and intreated him to undertake the explanation of the Greek inscriptions engraved on the marbles. *Selden* readily complied with his request, but desired the assistance of their common friends, the learned *Patrick Young*, (or *Junius*, as he styled himself in Latin,) librarian to *James* I. and *Charles* I. and *Richard James*, Fellow of Corpus Christi College, in Oxford.

"The next morning, as soon as it was light, this triumvirate met in *Arundel* Gardens," and commenced their operations, by cleaning and examining the marble, which contained the league made by the cities of *Smyrna* and *Magnesia* with *Seleucus Callinicus*, king of Syria. Afterwards they proceeded to the *Parian Chronicle*, and other inscriptions.

Of these marbles, the most curious and valuable is unquestionably that which contained the precious fragment of the *Parian Chronicle*, which, in its perfect state, exhibited a chronological detail of the principal events of *Greece*, and the neighbouring states, beginning with the accession of *Cecrops*, B.C. 1582, and ending with the archonship of *Diognetus*, at Athens, B.C. 264. But the Chronicle of the last 90 years was lost, so that the part now remaining ends at the archonship of *Diotimus*, B.C. 354. In this fragment, the inscription is, at present, so much corroded and defaced in many places, that the sense can only be discovered by very learned, industrious, and sagacious antiquaries; or, more properly speaking, decyphered and supplied by their *conjectures*.

In the turbulent reign of *Charles* I. and the subsequent usurpation of *Cromwell*, Arundel House was often deserted by the illustrious owners; and in their absence, some of the marbles, which were deposited in the gardens, were defaced or broken, and others either stolen, or used to repair the house, to the great detriment of literature. This was, most unfortunately, the fate of the chronological marble in particular; the upper part of it, containing at least half of the inscription, is said to have been worked up in repairing a chimney in *Arundel* House! The fragment now remaining begins with these words—*εσκευασε και νομισμα*, l. 46, epoch. 31.

In the year 1667, the Hon. *Henry Howard*, second son of

gunt, longitudinem pedum 7, et pollicum 6, occupat. Lavando, et sæpius detergendo, lectioni accommodam reddimus, mutuas tradimus operas, et demum quæ reliqua erant exscribimus. *Selden's* Works, Vol. II. p. 1439.

Henry, Earl of *Arundel*, and grandson, by the mother's side, of the first collector, on the application of *John Evelyn*, Esq. presented these curious remains of antiquity to the University of Oxford, where they are carefully preserved in a room adjoining to the public schools, called the *Musæum Arundelianum.*

The first edition of the Arundelian Inscriptions was published by *Selden*, in 1628, the year after their arrival, in a small quarto volume, entitled *Marmora Arundeliana*, including twenty-nine Greek and Latin inscriptions, copied from the marbles, with a translation and commentary.

When his edition (which is chiefly the basis of the rest) grew scarce, Bishop *Fell* engaged Mr. *Prideaux* to publish a second, which he did, in 1676, under the title of *Marmora Oxoniensia*, and augmented it with the variorum notes of *Lydiat*, *Ursatus*, and other learned commentators.

In 1732, a third and enlarged variorum edition was published by Mr. *Maittaire*, with the comments of *Selden*, *Price*, *Palmerius*, *Lydiat*, *Marsham*, *Prideaux*, *Reinesius*, *Spon*, *Smith*, *Bentley*, *Maffei*, *Dodwell*, along with his own conjectures and remarks on the marbles, and the preceding comments.

In 1763, after the University had acquired a great variety of other ancient marbles, by the benefactions of Sir *George Wheeler*, the Countess of *Pomfret*, in 1755, Mr. *Dawkins*, Dr. *Rawlinson*, and others; Dr. *Chandler* undertook to give the public a new and improved edition of these valuable remains of antiquity, in a very magnificent volume, in which he has corrected the mistakes of his predecessors, and, in the *Parian Chronicle* especially, has supplied the lacunæ by many happy conjectures. These are introduced in the following copy of the original Greek Chronicle, given by him; and the English translation which follows, is chiefly that of *Hewlett*, founded thereon; which, therefore, is greatly superior to those of Count *Scipio Maffei*, in Italian, M. *Du Fresnoy*, in French, and Dr. *Playfair*, in English, from the earlier editions.

CHRONICUM PARIUM

EX

MARMORIBUS ARUNDELIANIS.

...... ου .... νπαν .... ων .... νων ανεγραψα τους αν[ωθεν χρονους] αρξαμ[εν]ος απο Κεκροπος του πρωτου βασιλευσαντος Αθηνων, είως αρχοντος εμ Παρῳ [μεν Αστ]υανακτος, Αθηνησιν δε Διογνητου.

1. Αφ οὑ Κεκροψ Αθηνων εβασιλευσε, και ἡ χωρα Κεκροπια εκληθη, το προτερον καλουμενη Ακτικη, απο Ακταιου του αυτοχθονος, ετη ΧΗΗΗΔΠΙΙΙ.
2. Αφ οὑ Δευκαλιων παρα τον Παρνασσον εν Λυκωρειᾳ εβασιλευσε, [βα]σιλε[υο]ντος Αθηνων Κεκροπος, ετη ΧΗΗΗΔ.
3. Αφ οὑ δικη Αθηνησι[ν εγε]νετο Αρει και Ποσειδωνι ὑπερ Αλιρροθιου του Ποσειδωνος, και ὁ τοπος εκληθη Αρειος παγος ετη ΧΗΗΙΔ'ΔΠΙΙΙ, βασιλευοντος Αθηνων Κρ[ανα]ου.
4. Αφ οὑ κατακλυσμος επι Δευκαλιωνος εγενετο, και Δευκαλιων τους ομβρους εφυγεν εγ Λυκωρειας εις Αθηνας προ[ς Κρανα]ον, και του Διο[ς του Ολυμπιου το ἱερ]ον ιδ[ρυσατ]ο, [και] τα σωτηρια εθυσεν, [ε]τη ΧΗΗΙΔ'ΔΠ, βασιλευοντος Αθηνων Κρ[α]ν[α]ου.
5. Α[φ οὑ Αμφι]κτυων Δευκαλιωνος εβασιλευσεν εν Θερμοπυλαις, και συνηγε [τ]ους περι τον ορον οικουντας, και ω[νο]μασεν Αμφικτυονας, και Π[υλαια]ν, οὑ[περ] και νυν ετι θυουσιν Αμφικτυονες, [ε]τη ΧΗΗΙΔ'ΠΙΙΙ, βασιλευοντος Αθηνων Αμφικτυονος.
6. Αφ οὑ Ἑλλην ὁ Δευκ[αλιωνος Φθι]ωτιδος εβασιλευσε, και Ἑλληνες [ων]ομασθησαν, το προτερον Γραικοι καλουμενοι, και τον αγωνα Παν[αθ[η]ναι[κον συνεστησαντο, ετη] ΧΗΗΙΔ'ΠΙΙ, βασιλευοντος Αθηνων Αμφικτυονος.
7. Αφ οὑ Καδμος ὁ Αγηνορος εις Θηβας αφικετο [κατα χρησμον, και] εκτισεν την Καδμειαν, ετη ΧΗΗΙΔ'Π, βασιλευοντος Αθηνων Αμφικτυονος.
8. Αφ οὑ [Ευρωτας και Λακεδαιμων Λακω]νικης εβασιλευσαν, ετη ΧΗΗΙΔ'ΙΙ, βασιλευοντος Αθηνων Αμφικτυονος.
9. Αφ οὑ ναυ[ς πεντ]η[κοντα κωπ]ων εξ Αιγυπτου [ε]ις την Ελλαδα επλευσε, και ωνομασθη Πεντεκοντορος, και αἱ Δαναου θυγατερες ... . [Αμυμ]ωνη, και Βα .... λαρευω, και Ελικη, και Αρχεδικη αποκληρωθεισαι ὑπο των λοιπων [ἱερον ιδρυσ]αντ[ο,] και εθυσαν επι

της ακτης εμ παρα[*λι*]*αδι εν Λινδῳ της* '*Ροδιας, ετη* ΧΗΗΔΔΔΠΙΙ, *βασιλευο*[*ντος* Αθηνων Εριχθονιου.

10. Αφ οὑ Εριχ]*θονιος* Παναθηναιοις *τοις πρωτοις γενομενοις ἁρμα εζευξε, και τον αγωνα εδεικνυε, και* Αθηναι[*α μετω*]*ν*[*ομασε, κ*]*αι* [*αγαλμα της* Θ]*εων μητρος εφανη εγ* Κυβελοις, *και* Υαγνις *ὁ* Φρυξ *αυλους πρωτος ἑυρεν εγ* Κ[*ελαι*]*ναι*[*ς τη*]*ς* Φρυγ[*ι*]*ας,* [*και την αρμονιαν την κ*]*αλουμενην Φρυγιστι πρωτος ηυλησε, και αλλους νομους* Μητρος, Διονυσου, Πανος, *και τον επ*[*ιχωριων* Θεων *και* Ἡρωων,] *ετη* ΧΗΗΔΔΔΔΙΙ, *βασιλευοντος* Αθηνων Εριχθονιου *του το ἁρμα ζευξαντος.*

11. Αφ οὑ Μινως [*ὁ*] *πρ*[*ωτος ε*]*βα*[*σιλευσε, και* Κυ]*δωνιαν ωκισε, και σιδηρος ηυρεθη εν τῃ* Ιδῃ, *εὑροντων των* Ιδαιων Δακτυλων Κελμιος *κ*[*αι* Δαμναναιως, *ετη* ΧΗ𐅄ΔΠΙΙΙ, *βασι*]*λευοντος* Αθηνων Πανδιονος.

12. Αφ οὑ Δημητηρ *αφικομενη εις* Αθηνας *καρπον εφυ*[*τε*]*υεν, και πρ*[*ος αλλους επεμψε πρ*]*ωτη δ*[*ια* Τ]*ριπτολεμου του* Κελεου *και* Νεαιρας, *ετη* ΧΗΔΔΔΔΠ, *βασιλευοντος* Αθηνησιν Εριχθεως.

13. Αφ οὑ Τριπτο[*λεμος καρπον*] *εσπειρεν εν τῃ* Ραριᾳ *καλουμενῃ* Ελευσινι, *ετη* Χ[Η]ΔΔΔΔ[ΙΙ], *βασιλευοντος* Αθηνων [Εριχθεως.

14. Αφ ο]*ὑ*[Ορφευς *την*] *αυτου ποιησιν εξ*[*ε*]*θηκε,* Κορης *τε ἁρπαγην, και* Δημητρος *ζητησιν, και την αυτου* [*καταβασιν, και μυ*]*θο*[*υ*]*ς των ὑποδεξαμενων τον καρπον, ετη* ΧΗΔΔΔΠ, *βασιλευοντος* Αθηνων Εριχθεως.

15. [Αφ οὑ Ευμολπος *ὁ* Μουσαι]*ου τα μυστηρια ανεφηνεν εν* Ελευσινι, *και τας του* [*πατρος* Μ]*ουσαιου ποιησ*[*ει*]*ς εξεθηκ*[*εν*], *ετη* ΧΗ . . . *βασιλευοντος* Αθηνων Εριχθεως *του* Πανδιονος.

16. Αφ οὑ *καθαρμος πρωτος εγενετο* [*δια φον*]*ου πρωτῳ αον . . . εαυτ . . . . . .* [*ετη* Χ𐅄]ΔΙΙ, *βασιλευοντος* Αθηνων Πανδιονος *του* Κεκροπος.

17. Αφ οὑ [*ε*]*ν* Ελευσινι *ὁ γυμνικος* [*αγων ετεθη, ετη* Χ . . . . . , *βασιλευοντος* Αθηνων Πανδιονος *του* Κεκροπος.]

18. Αφ οὑ [*αἱ ανθρωποθυσι*]*αι,* [*και*] *τα* Λυκαια *εν* Αρκαδιᾳ *εγενετο, και* λ . . *κκε . . . . .* Λυκαονος *εδοθησαν* [*εν*] *τοις* Ελλ[*η*]*σι*[*ν, ετ*]*η* [Χ] . *ν* . . *βασιλευοντος* Αθηνων Πανδιονος *του* Κεκροπος.

19. Αφ οὑ *κα*[*θαρισθεις εν* Ελευσιν]*ι* Ἡρακλης [*εμυηθη ξεν*]*ω*[*ν πρωτ*]*ος,* [*ετη* Χ] . . . *βασιλευοντος* Αθηνησιν Αιγεως.

20. Αφ οὑ Αθηνησι [*σπανι*]*ς των καρπων εγενετο, και μαντευομενος* [*τοις*] Αθην[*αιοις* Απολ]λων *ην*[*αγκασεν δικα*]*ς υπυσχε*[*ι*]*ν, α*[*ς*] *αμ* Μινως *αξιωσει, ετη* ΧΔΔΔΙ, *βασιλευοντος* Αθηνων Αιγ[*εως.*]

21. Αφ οὑ Θησ[*ευς*] Αθηνων *τας δωδεκα πολεις εις το αυτο συνῳκισεν, και πολιτειαν και την δημοκρατειαν* [*πρωτος καθεστηκω*]*ς* Αθηνων, *τον των* Ισθμιων *αγωνα εθηκε,* Σινιν *αποκτεινας, ετη* 𐅅ΗΗΗΗ𐅄ΔΔΔΔΠ.

22. Απο της Αμμον[*ιας*] *τη*[*ς πρωτης, ετη* 𐅅 ΗΗΗΗ𐅄]ΔΔΔΔΙΙ, *βασιλευοντος* Αθηνων Θησεως.

23. Αφ οὑ Αργειοι[*σιν*] Αδρα[*στος ε*]*βασιλευσ*[*ε*]*ν, και τον αγωνα* [*ε*]*ν*

[Νεμεᾳ ε]θ[εσ]αν [οἱ Επτα,] ετη 𐅅ΗΗΗΗ𐅄ΔΔΔΠΙΙ, *βασιλευοντος* Αθηνων Θησεως.

24. Αφ οὗ οἱ [Ελλη]νες εις Τροιαν ε[στ]ρατευ[σαντο] ετη 𐅅ΗΗΗΗ𐅄ΙΙΙΙ, βασιλευοντος Αθη[νων Μεν]εσθεως, τρεις και δεκατου ετους.

25. Αφ οὗ Τροια ἡλω, ετη 𐅅ΗΗΗΗΔΔΔΠ, βασιλευοντος Αθηνων [Μενεσθε]ως, [εικοστου και] δευτερου ετους, μηνος Θ[αργηλιω]νος εβδομῃ φθινοντος.

26. Αφ οὗ Ορεστη[ς εν Σκυθ]ιᾳ των αυτο[υ μανιων ιαθη, και Α]ιγισθου θυγατρι [Ηριγ]ον[ῃ ὑπερ Αι]γισθου και αυ[τῳ δικη εγενετ]ο εν Αρειου παγῳ, ἣν Ορεστης ενικησεν [ισων ψηφ]ων[ουσων] ετη [𐅅]ΗΗΗΗΔΔΔ[Δ] ΙΙ, βασιλευοντος Αθηνων Δημοφωντος,

27. Αφ οὗ [Σαλαμινα εν] Κυπρῳ Τευκρος ωκισεν, ετη 𐅅ΗΗΗΗΔΔΔΠΙΙΙ, βασιλευοντος Αθηνων Δημοφωντος.

28. Αφ οὗ Νη[λ]ευς ωκισ[εν εγ Καριᾳ Μιλητον, αγειρας Ιωνας οἱ ωκισ]αν Εφεσον, Ερυθρας, Κλαζομενας, [Πριηνην, και Λεβεδον, Τηω,] Κολοφωνα, [Μ]υουντα, [Φωκαιαν,] Σαμον, [Χιον, και] τα [Παν]ιωνι[α] εγενετο, ετ[η 𐅅ΗΗΗ]ΔΙΙΙ, βασιλευοντος Αθηνων Μενεσθεως τρεις και δεκατου [ε]τους.

29. Αφ οὗ [Ἡσ]ιοδος ὁ ποιητης [εφαν]η, ετη 𐅅Η𐅅ΔΔ[Δ, βασιλευοντος Αθηνων] . . .

30. Αφ οὗ Ὁμηρος ὁ ποιητης εφανη, ετη 𐅅ΗΔΔΔΔΙΙΙ, βασιλευοντος Αθηνω[ν Δ]ιογνητου.

31. Αφ οὗ Φ[ει]δων ὁ Αργειος εδημ[ευθη, και μετρα και σταθμα] εσκευασε και νομισμα αργυρουν εν Αιγινῃ εποιησεν, ενδεκατος ων αφ Ηρακλεους, ετη 𐅅ΗΔΔΙ, βασιλευοντος Αθηνων [Μεγακλε]ους.

32. Αφ οὗ Αρχιας Ευαγητου, δεκατος ων απο Τημενου, εκ Κορινθου ηγαγε την αποικιαν [εις] Συρακου[σας, ετη ΗΗΗΗ𐅄ΔΔΔΙΙΙΙ, βασιλευον]τος Αθηνων Αισχυλου ετους εικοστου και ενος.

33. Αφ οὗ κατ' ενιαυτον ηρ[ξ]εν [Κ]ρ[ε]ων, ετ[η] ΗΗΗΗΔΔ.

34. Αφ οὗ [Λακεδαιμ]ο[νιοις Τ]υ[ρταιος συνεμαχησεν,] ετη ΗΗΗΗΔΠΙΙΙ, αρχοντος Αθηνησι Λυσι[ου].

35. Αφ οὗ Τερπανδρος ὁ Δερδενεος ὁ Λεσβιος τους νομους του[ς π]α[λαι]ων [καιν]ουσθαι αυλητ[ας εθε]λησε, και την εμπροσθε μουσικην μετεστησεν, ετη ΗΗΗ𐅄ΔΔΔΙ, αρχοντος Αθηνησιν Δρωπιλου.

36. Αφ οὗ Α[λυαττη]ς Λυδ[ων εβα]σιλευσ[εν, ετη ΗΗΗΔ]ΔΔΔΙ, αρχοντος Αθηνησιν Αριστοκλεους.

37. Αφ οὗ Σαπφω εγ Μιτυληνης εις Σικελιαν επλευσε φυγουσα, ... ολ . . . . . θ . . . . [ετη ΗΗΗΔΔΠΙΙΙ, αρχον]τος Αθηνησι μεν Κριτιου του προτερου, εν Συρακουσαις δε των [Γεω]μορων κατεχοντων την αρχην.

38. [Αφ οὗ Αμφικτυονες ενικησαν ελ]θοντες Κυρραν, και ὁ αγων ὁ γυμνικος ετεθη χρηματιτης απο των λαφυρων, ετη ΗΗ[Η]ΔΔΠΙΙ, αρχοντος Αθηνησι Σιμω[ν]ος.

39. Αφ οὑ [ὁ στεφ]ανιτης αγων παλιν ετεθη, ετη ΗΗΗΔ[Δ]ΙΙ, αρχοντος Αθηνησι Δαμασιου του δευτερου.

40. Αφ οὑ εν α[πην]αις Κωμω[διαι εφορεθησαν ὑπο] των Ικαριεων, ευροντος Σουσαριωνος, και αθλον ετεθη πρωτον ισχαδων αρσιχο[ς] και οινου [αμφορευς, ετη ΗΗ ... [αρχοντος Αθηνησι ....]

41. Αφ οὑ Πεισιστρατος Αθηνων ετυραννευσεν, ετη ΗΗ𐅄ΔΔΔΔΠΙΙ, αρχοντος [Αθηνησ]ι Κ[ωμι]ου.

42. Αφ οὑ Κροισος [εξ] Ασιας [εις] Δελφο[υ]ς α[πεπεμψεν, ετη ΗΗ𐅄]ΔΔΔΔΙΙ, αρχοντος Αθηνησι[ν Ευθυ]δημου.

43. Αφ οὑ Κυρος ὁ Περσων βασιλευς Σαρδεις ελαβε, και Κροισον ὑπο [Πυθι]ης σφαλ[λομενον εζωγρησεν, ετη ΗΗ𐅄ΔΔΔΙΙΙΙ, αρχοντος Αθηνων Ερξικλειδου. Ην δε] και Ιππωναξ κατα τουτον ὁ Ιαμβοποιος.

44. Αφ οὑ Θεσπις ὁ ποιητης [εφανη, πρωτος ὁς και] εδιδαξε [τραγωδιαν, ἡς αθλον ε]τεθη ὁ [τ]ραγος, ετη ΗΗ𐅄[ΔΔΙΙΙ], αρχοντος Αθ[ηνησιν Αλκ]αιου του προτερου.

45. Αφ οὑ Δαρειος Περσων εβασιλευσε, Μαγου τελευτησαντος, ετη [ΗΗ]𐅄[Π]Ι, αρχοντος Αθη[νησι] .....

46. Αφ οὑ Αρμοδιος και Αριστογε]ιτων απεκτε[ιναν Ιππα]ρχον Πεισιστρατου Α[θηνων τυραννον]ον, και Αθηναιοι σ[υνανεστ]ησαν τους Πεισιστρατιδας εκ[βαλλειν του Πελασγικ]ου τειχους, ετη ΗΗΔΔΔΔΠΙΙΙ, αρχοντος Αθηνησι [Κλισθενους.]

47. Αφ οὑ χοροι πρωτον ηγωνισαντο ανδρων, ὁν διδαξας Ὑπο[δι]κος Χαλκιδε[υς] ενικ[ησεν,] ετη ΗΗΔΔΔ[ΔΙΙΙΙ,] αρχοντος Αθηνησι[ν Ι]σαγορου.

48. Αφ οὑ νε[ως Αθηνας της] Ιππια[ς ιδρυσθη] Αθηνησιν, ετη ΗΗΔΔΔΙ, αρχοντος Αθηνησι Πυθοκριτου.

49. Αφ οὑ εμ Μαραθωνι μαχη εγενετο Αθηναιοις προς τους Περσας, [και Αρταφερνεα το]ν Δαρειου αδελ[φιδεο]ν, τον στρατηγον ενικων Αθηναιοι, ετη ΗΗΔΔΠΙΙ, αρχοντος Αθην[ησι του] δευτερου [Φαινιππου, και] εν μαχῃ συνηγωνισατο Αισχυλος ὁ ποιητης [ετ]ω[ν] ων ΔΔΔΠ.

50. Αφ οὑ Σιμωνιδης ὁ Σιμωνιδου παππος του ποιητου, ποιητης ων και [αυτος, Αθη]νησι, και Δαρειος τελευτᾳ, Ξερξης δε ὁ ὑιος βασιλευει, [ετη ΗΗΔ]ΔΠ[Ι], αρχοντος Αθηνησιν Αριστειδου.

51. Αφ οὑ Αισχυλος ὁ ποιητης τραγωδιᾳ πρωτον ενικησε, και Ευριπιδης ὁ ποιητης εγενετο, και Στησιχορος ποιητης ε[ις την] Ελλαδα [αφικετ]ο, ετη ΗΗΔΔΙΙ, αρχοντος Αθηνησι Φιλοκρατους.

52. Αφ οὑ Ξερξης την σχεδιαν εζευξεν εν Ἑλλησποντῳ, και τον Αθω διωρυξε, και ἡ εν Θερμο[πυ]λαις μαχη εγενετο, και ναυμαχια τοις Ελλησι περι Σαλαμινα προς τους Περσας, ἡν ενικων οἱ Ελληνες, ετη ΗΗΔΠΙΙ, αρχοντος Αθηνησι Καλλιαδου.

53. Αφ οὑ ἡ εν [Π]λαταιαις μαχη εγενετο Αθηναιοις προς Μαρδονιον τον Ξερξου στρατηγον, ἡν ενικων Αθηναιοι, και Μαρδονιος ετελευτησεν

εν τῃ μαχῃ, και το πυρ ερυη[*σε εν Σικ*]*ελιᾳ, περι την Αιτνιαν, ετη* Η[Η]ΔΠΙ, *αρχοντος Αθηνησι Ξαντιππου.*

54. *Αφ οὑ* [*Γε*]*λων ὁ Δεινομενους* [*Συρακουσων*] *ετυραννευσεν, ετη* ΗΗΔΠ, *αρχοντος Αθηνησι Τιμοσθεν*[*ους.*]

55. *Αφ οὑ Σιμωνιδης ὁ Λεωπρεπους ὁ Κειος, ὁ το μνημονικον ευρων, ενικησεν Αθηνησιν διδασκων, και αἱ εικονες εσταθησαν Αρμοδιου και Αριστογειτονος, ετη* ΗΗ[ΔΙΙΙΙ], *αρχοντος Αθηνησι*[*ν Α*]*δειμαντου.*

56. *Αφ οὑ Ἱερων Συρακουσων ετυραννευσεν, ετη* ΗΗΠΙ[Ι]Ι, *αρχοντος Αθηνησι Χ*[*αρ*]*ητος. Ην δε και Επιχαρμος ὁ ποιητης κατα τουτον.*

57. *Αφ οὑ Σοφοκλης ὁ Σοφιλλου ὁ εκ Κολωνου ενικησε τραγωδιᾳ, ετων ων* ΔΔΠΙΙΙ, *ετη* ΗΗΠΙ, *αρχοντος Αθηνησι Αψηφιονος.*

58. *Αφ οὑ εν Αιγος ποταμοις ὁ λιθος επεσε, και Σιμωνιδης ὁ ποιητης ετελευτησεν, βιους ετη* ΔΔΔΔΔ̅Δ̅ΔΔΔ, *ετη* ΗΗΠ, *αρχοντος Αθηνησιν Θεαγενιδου.*

59. *Αφ οὑ Αλεξανδρος ετελευτησεν, ὁ δε υἱος Πε*[*ρ*]*δικκας Μακεδονων εβασιλευει, ετη* Η𐅄ΔΔΔΔΠ[ΙΙΙ,] *αρχοντος Αθηνησιν Ευθιππου.*

60. *Αφ οὑ Αισχυλος ὁ πο*[*ι*]*ητης, βιωσας ετη* 𐅄ΔΠΙΙΙΙ, *ετελευτησεν εν* [*Γελ*]*ᾳ της* [*Σι*]*κελιας, ετη* Η𐅄ΔΔΔΔΙΙΙ, *αρχοντος Αθηνησ*[*ι*] *Καλλ*[*ι*]*ου του προτερου.*

61. *Αφ οὑ Ευριπιδης, ετων ων* ΔΔΔΔΙΙΙ, *τραγωδιᾳ πρωτον ενικησεν, ετη* Η𐅄Δ[ΔΠΙΙΙΙ,] *αρχοντος Αθηνησι Διφι*[*λου. Η*]*σαν δε κατα Ευριπιδην Σωκρατης, και* [*Ανα*]*ξαγορας.*

62. *Αφ οὑ Αρχελαος Μακεδονων εβασιλευσε Περδικκου τελευτησαντος, ετη* Η[𐅄ΠΙ, *αρχ*]*οντος Αθηνησιν Αστυφιλου.*

63. *Αφ οὑ Διονυσιος Συρακουσων ετυραννευσεν, ετη* ΗΔΔΔΔΙΙΙΙ, *αρχοντος Αθηνησιν Ευκτημονος.*

64. *Αφ οὑ Ευριπιδης, βι*[*ωσας ετη* 𐅄ΔΔΠΙΙ, *ετε*]*λευτησεν, ετη* ΗΔΔΔΔ[ΙΙΙ], *αρχοντος Αθηνησιν Αντιγενους.*

65. *Α*[*φ*] *οὑ Σο*[*φ*]*οκλης ὁ ποιητης, βιωσας ετη* [𐅄]ΔΔΔΔΙ, *ετελευτησεν, και Κυρος ανεβ*[*ησε επι τον αδελφον, ετη* ΗΔΔΔΔΙΙ, *αρχ*]*οντος Αθηνησι Καλλια του πρ . τ . . ου.*

66. *Αφ οὑ Τελεστης Σελ*[*ινουντιος ε*]*νικησεν Αθηνησιν, ετη* ΗΔΔΔΠ[ΙΙΙ], *αρχοντος Αθηνησι Μικωνος.*

67. *Αφ οὑ* [*επανηλθον οἱ μετ*]*α Κυρου αναβαντες, και Σωκρατης φιλοσοφ*[*ο*]*ς ετελευτησε,* [*βιους*] *ετη* 𐅄ΔΔ, *ετη* ΗΔΔΔΠ[Ι],*αρχοντος Αθηνησι Λαχητος.*

68. *Αφ οὑ Α*[*στυδαμας πρωτον εδιδαξεν*] *Αθηνησιν, ετη* ΗΔΔΔΠ, *αρχοντος Αθηνησιν Αριστοκρατους.*

69. *Αφ οὑ Ξ*[*ανθος ὁ ποιητης Σαρδ*]*ιανος διθυραμβῳ ενικησεν Αθηνησιν, ετη* Η . . [*αρχοντος Αθηνησι . . . .*

70. *Αφ*] *οὑ Φιλοξενος διθυραμβοποιος τελευτᾳ βιους ετη* 𐅄Π, *ετη* ΗΔΠΙ, *αρχοντος Αθηνησι Πυθεου.*

71. *Αφ οὑ Αναξανδριδης ὁ κωμ*[*ωδοποιος ενικησεν Αθηνησιν, ετη* ΗΔΙΙΙ, *αρχοντος*] *Αθηνησι Καλλεου.*

72. Αφ οὑ Λστυδαμας Αθηνησιν ενικησεν, ετη ΗΠΙΙΙΙ, αρχοντος Αθηνησιν Αστειου. Κατεκαη δε τοτε κα[ι εν ουρανῳ ἡ μεγαλη λαμπας.

73. Αφ οὑ εν Λευκτροις μαχη ε]γενετο Θηβαιων και Λακεδαιμονιων, ἡν ενικων Θηβαιοι, ετη ΗΠΙΙ, αρχοντος Αθηνησι Φρασικλειδου. [Κατα τουτον δε και Αλεξανδρος ὁ Αμυντου Μακεδονων] βασιλευει.

74. Αφ οὑ Στησιχορος ὁ Ιμεραιος ὁ δευτερος ενικησεν Αθηνησιν, και ωκισθη Μεγαληπολ[ις εν Αρκαδιᾳ, ετη ΗΠΙ, αρχοντος Αθηνησι Δυσκινητου.]

75. Αφ οὑ Διονυσιος Σικελιωτης ετελευτησεν, ὁ δε υἱος Διονυσιος ετυραννευσεν, και Αλε[ξα]ν[δρου τελευτησαντος Πτολεμαιος Μακεδονων βασι]λευει, ετη ΗΙΙΙΙ, αρχοντος Αθηνησι Ναυσιγενους.

76. Αφ οὑ Φωκεις το εν Δελφοις [ἱερον εσυλευσαν, ετη 𐅄ΔΔΔΙΙΙΙ, αρχοντος Αθην]ησι Κηφισοδωρου.

77. Αφ οὑ Τιμοθεος βιωσας ετη 𐅄ΔΔΔΔ ετελευτησεν, [ὁ δε Φιλιππος Αμυντου των Μα]κεδονων βασιλευει, και Αρταξερξης ετελευτησεν· Ωχος δε ὁ υἱος β[ασιλευει των Περσων, και] .... ενικησεν, ετη 𐅄ΔΔΔΙΙΙ, αρχοντος Αθηνησιν Αγαθοκλε[ους.

78. Αφ οὑ Αλεξανδρος ὁ Φιλιππου εγε]νετο, ετη 𐅄ΔΔΔΙ, αρχοντος Αθηνησιν Καλλιστ[ρατου, ... Ην δε και Αριστοτελης ὁ φιλο]σοφος κατα τουτο[ν.]

79. Αφ οὑ Κα .... ετ[η] 𐅄 .... αρχοντος..........

Cætera desiderantur.

TABLE XII. THE PARIAN CHRONICLE.

B. C.

****** I have described pr[eceding times,] begin[n]ing from *Cecrops*, the first who reigned at Athens, until [*Ast*]*yanax*, archon at Paros, and *Diognetus* at Athens: [ending Ol. 129, 1. B.C. 264.]

1. Since *Cecrops* reigned at Athens, and the country was called Cecropia, before called Actica, from *Actæus* the native, MCCCXVIII years - - - 1582

2. Since *Deucalion* reigned in Lycoria near Parnassus, *Cecrops* [re]ign[in]g at Athens, MCCCX years - 1574

3. Since the trial at Athen[s hap]pened between *Mars* and *Neptune*, concerning *Halirrothius* [the son] of Neptune, and the place was called Areopagus, MCCLXVIII years: *Cr*[*ana*]*us* reigning at Athens 1532

4. Since the deluge happened in the time of *Deucalion;* and Deucalion fled from the rains, from Lycoria to

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Athens, unto [*Crana*]*us*, and bu[ilt the temp]le of *Jupit*[*er Olympius*, and] offered sacrifices for his preservation, MCCLXV years: *Cr*[*a*]*n*[*a*]*us* reigning at Athens - - - - - - - - 1529

5. S[ince *Amphi*]*ctyon* [the son] of *Deucalion* reigned in Thermopylæ, and assembled the people inhabiting that district, and [nam]ed them Amphictyones, and [the place of council] P[ylæa,] w[here] the Amphictyones still sacrifice, MCCLVIII years: *Amphictyon* reigning at Athens - - - - 1522
6. Since *Hellen* [the son] of *Deuc*[*alion*] reigned in [Phthi]otis, and they were [na]med *Hellenes*, who before were called *Graikoi* (Greeks), and [they instituted] the Panathe[næan] games, MCCLVII years: *Amphictyon* reigning at Athens - - 1521
7. Since *Cadmus* [the son] of *Agenor* came to Thebes, [according to the oracle and] built the Cadmea, MCCLV years: *Amphictyon* reigning at Athens - 1519
8. Since [*Eurotas* and *Lacedæmon*] reigned in [Laco]nia, MCCLII years: *Amphictyon* reigning at Athens - - - - - - - - 1516
9. Since a shi[p with fi]f[ty oar]s sailed from Egypt to Greece, and was called *Pentecontorus;* and the daughters of *Danaus* . . . . [*Amym*]*one*, and *Ba* . . . . . and *Helice* and *Archedice*, elected by the rest, [bu]il[t a temple,] and sacrificed upon the shore at Para[li]as, in Lindus [a city] of Rhodes, MCCXLVII years: *Erichthonius* reig[ning at Athens] - - - - - - - - - 1511
10. [Since *Erich*]*thonius*, when the Panathenæa were first celebrated, yoked [horses to] a chariot, and exhibited the contest, and [changed the name] of Athenæa; and [the image] of the mother of the [g]ods appeared in [the mountains] of Cybele; and *Hyagnis* the Phrygian first invented flutes at C[elæ]ne [a city] of Phrygia, and first played on the flute [the harmony] called Phrygian, and other *nomes* (tunes) of the mother [of the gods] of Dionysus, of Pan, and that of [the divinities of the country, and the heroes], MCCXLII years: *Erich-*

B. C.

thonius who yoked [horses to] the chariot, reigning at Athens - - - - - - - 1506

11. Since *Minos* [the] fir[st re]ig[ned] and built [Cy]donia; and iron was found in Ida, by the Idæi Dactuli *Celmis* [and *Damnaneus*, MCLXVIII years]: *Pandion* [reig]ning at Athens - - [1432]

12. Since *Ceres* coming to Athens pla[nt]ed corn, and first [sent it to other countries] by *Triptolemus* [the son] of Celeus and Neæra, MCXLV years: *Erichtheus* reigning at Athens - - - - - 1409

13. Since *Tripto[lemus]* sowed [corn] in Raria, called Eleusis, M[C]XL[II] years: [*Erichtheus*] reigning at Athens - - - - - - - - 1406

14. [Since *Orpheus*] pub[li]shed his poem [on] the rape of the Virgin [*Proserpine*], and the search of *Ceres;* his [descent to the shades], and [the fables] concerning those who received the corn, MCXXXV years: *Erichtheus* reigning at Athens - - - 1399

15. [Since *Eumolpus* the son of *Musæ*]*us* celebrated the mysteries in Eleusis, and publish[ed] the po[em]s of h[is father *M*]*usæus*, MC ... years: [*Erichthe*]*us* [the son] of *Pandion* [reigning at Athens] - - 13..

16. Since a lustration was first performed [by slaying .... [ML]XII [years]: *Pandion* the [son] of *Cecrops* [the second] reigning at Athens - - 1326

17. Since the Gymnastic [Games were instituted i[n] Eleusis, [M] ... X ... years: *P*[*andion* the son of Cecrops reigning at Athens] - - - - ....

18. Since [human sacrific]es [and] the Lycæa were celebrated in Arcadia, and ...... of *Lycaon* were given [among] the Gr[ee]ks, M ... years: *Pandion* [the son] of *Cecrops* reigning at Athens - - - ....

19. Since Hercules, having been pur[ified in Eleusi]s, [was initiated the fir]st of [stran]gers, M ... [years]: *Ægeus* reigning at Athens - - - - - - ...

20. Since a [scarcity] of corn happened at Athens, and [*Apol*]*lo* being consulted by [the] Athen[ians] ob[liged them] to under[g]o [the penalti]es wh[ich] *Minos* (the second) should require, MXXXI years: *Æg*[*eus*] reigning at Athens - - - - - 1295

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21. Since *Thes*[*eus*] incorporated the twelve cities of Attica into one (community); and [having first established]ed a civil constitution and a popular government at Athens, he instituted the Isthmian Games, after he had slain *Sinis*, DCCCCXCV years - 1259
22. From the first (celebration of the festival called) Ammon, [DCCCCXC]II years: *Theseus* reigning at Athens - - - - - - - - - 1256
23. Since *Adra*[*stus* r]eign[e]d over the Argi[ves], and [the seven commanders in]st[itut]ed the Games [i]n [Nemea,] DCCCCLXXXVII years: *Theseus* reigning at Athens - - - - - - - - 1251
24. Since the [Gree]ks militated against *Troy*, DCCCCLIV years: [*Men*]*estheus* reigning at Athe[ns], in the thirteenth year (of his reign) - - 1218
25. Since *Troy* was taken, DCCCCXLV years: [*Me-nesth*]*eus* reigning at Athens, in the (twenty) second year (of his reign), on the twenty-fourth day of the month *Th*[*argelio*]*n* - - - - - - - 1209
26. Since *Orestes* [in *Scythi*]*a* was [cured of his madness] and [a cause] between hi[m] and [*Erig*]*one*, the daughter of [*Æ*]*gisthus*, [concerning] (the murder of) *Ægisthus*, was tried in Areopagus, which *Orestes* gained, [the vot]es [being equal], [D]CCCCXXX[X]II years: *Demophon* reigning at Athens - - - - - - - 1206
27. Since *Teucer* built [Salamis in] Cyprus, DCCCCXXXVIII years: *Demophon* reigning at Athens - - - - - - - - - 1202
28. Since *Ne*[*l*]*eus* bui[lt Miletus in Caria, having collected the Ionians,] who [bui]lt Ephesus, Erythræ, Clazomene, P[riene and Lebedus, Teos,] Colophon, [M]yus, [Phocea,] Samos, [Chios;] and the [Pan]i-oni[a] were instituted, [DCCC]XIII years: *Menes-theus* reigning at Athens, in the thirteenth year [of his reign] - - - - - - - - - - 1077
29. Since [*Hes*]*iod* the poet [flourish]ed, DCLXX[X] years: ——— [reigning at Athens] - - - ....
30. Since *Homer* the poet flourished, DCXLIII years: [*D*]*iognetus* reigning at Athen[s] - - - 907

B. C.

31. Since *Ph*[*ei*]*don* the Argive was pros[cribed], and made [measures and weights,] and coined silver money in Ægina, being the eleventh from *Hercules*, DCXXXI years: [*Megacl*]*es* reigning at Athens - 895

II. Period.

32. Since *Archias* [the son] of *Evagetus*, being the tenth from *Temenus*, conducted a colony from Corinth [to] Syracu[se, CCCCXCIV years:] *Æschylus* [reign]ing at Athens, in the twenty-first year [of his reign] 758
33. Since [*C*]*r*[*e*]*on* was annual Ar[ch]on, CCCCXX years - - - - - - - - - 684
34. Since [*Tyrtæus* with the Lacedem]o[nians fought against the Messenians] CCCCXVIII years: *Lysi*[*as*] being Archon at Athens - - - - 682
35. Since *Terpander* [the son] of *Derdeneus* the Lesbian, [dire]cted the flute-pl[ayers] to [ref]orm the tunes of the [An]ci[ents,] and changed the old music, CCCLXXXI years: *Dropilus* being Archon at Athens - - - - - - - - - 645
36. Since *A*[*lyatte*]*s* reigned in [Lydi]a, [CCCX]LI years: *Aristocles* being Archon at Athens - - 605
37. Since *Sappho* sailed from Mitylene to Sicily, flying ..... [CCCXXVIII years]: *Critias* the first [being Arch]on at Athens; the [*Geo*]*mori* possessing the government in Syracuse - - - - - 592
38. [Since the *Amphictyones* conquered, having in]vaded Cyrrha, and the Gymnastic games were celebrated, the prize being allotted out of the spoils, CC[C]XXVII years: *Simo*[*n*] being Archon at Athens - - - - - - - - 591
39. Since [the Gymnastic] games were again celebrated, [in which the prize was a cro]wn, CCCX[X]II years: *Damasias* the second, being Archon at Athens - 586
40. Since Come[dies were carried in car]ts [by] the Icarians, *Susarion* being the inventor, and the first prize proposed was a bask[et] of figs, and a small vessel of wine, CC ...... [years: .....] being Archon at Athens - - - - - - 56 .

B. C.

41. Since *Pisistratus* became tyrant at Athens, CCXCVII years: *C[omi]as* being Archon at Athens - - 561
42. Since *Crœsus* s[ent ambassadors out] of Asia [to] Delph[i, CCX]CII [years: *Euthy*]*demus* being Archon at Athens - - - - - - - - - 556
43. Since *Cyrus*, King of Persia, took Sardis, and [apprehended] *Crœsus*, who was de[ceived by the [Pyth]ia, [284 years]: *Er*[*xiclides* being Archon at Athens] - - - - - - - - - - [548]
At this time [lived] *Hipponax*, the Iambic poet.
44. Since *Thespis* the poet [flourished, the first who] taught (or exhibited) [tragedy,] for which a [g]oat was [ap]pointed [as the prize,] CCL[XXIII] years: [*Alc*]*æus* the first being Archon at Ath[ens] - - [537]
45. Since *Darius* reigned over the Persians, (*Smerdis*) *Magus* being dead, [CC]L[VI] years: . . . . . being Archon at Athe[ns] - - - - - - [520]
46. Since *Harmodius* and [*Aristoge*]*iton* sle[w *Hippa*]*rchus* [the son] of *Pisistratus*, [the tyra]nt of A[thens], and the Athenians co[nspir]ed to ex[pel] the Pisistratidæ [from their retreat within the Pelasgi]c wall, CCXLVIII years: [*Clisthenes*] being Archon at Athens - - - - - - - - - - 512
47. Since choruses of men first contended, [and] *Hypo*[*di*]*cus* the Chalcidi[an], having taught one [of them] gained the vict[ory,] CCXL[IV] years: [*I*]*sagoras* being Archon at Athen[s] - - - - - - 508
48. Since the temp[le of Minerva] Hippia [was built] at Athens, CCXXXI years: *Pythocritus* being Archon at Athens - - - - - - - - - - 495
49. Since the battle at Marathon was fought by the Athenians against the Persians, [and] the Athenians defeated [*Artaphernes*, th]e nep[hew] of *Darius*, who commanded (the Persian forces,) CCXXVII years: [*Phænippus*] the second being Archon at Athens. In which battle *Æschylus* the poet fought, being [then] XXXV [y]ear[s of age] - - - - 491
50. Since *Simonides*, the grand-father of *Simonides* the poet, being also himself a poet, (dies) at Athens; and *Darius* dies, and *Xerxes* [his] son reigns, CCX[XV]I years: *Aristides* being Archon at Athens 490

B. C.

51. Since *Æschylus* the poet first gained the victory in tragedy, and *Euripides* the poet was born, and *Stesichorus* the poet [went into] Greece, CCXXII years: *Philocrates* being Archon at Athens - - 486
52. Since *Xerxes* joined together a bridge of boats on the Hellespont, and dug through (mount) Athos, and the battle was fought at Thermopylæ, and the sea-fight by the Greeks at Salamis, against the Persians, in which the Greeks were victorious, CCXVII years: *Calliades* being Archon at Athens - - 481
53. Since the battle at [P]latæa was fought by the Athenians against *Mardonius*, the general of *Xerxes*, in which the Athenians conquered, and Mardonius fell in the battle; and fire flowed [in Sic]ily round Ætna, C[C]XVI years: *Xantippus* being Archon at Athens - - - - - - - - - 480
54. Since [*Ge*]*lon* [the son] of *Dinomenes* became tyrant [of Syracuse,] CCXV years: *Timosthen*[*es*] being Archon at Athens - - - - - - 479
55. Since *Simonides* [the son] of *Leoprepes* the Cean, who invented the art of memory, teaching [a chorus] at Athens, gained the victory; and the statues of *Harmodius* and *Aristogeiton* were erected, CC[XIV] years: [*A*]*dimantus* being Archon at Athens - 47[8]
56. Since *Hiero* became tyrant of Syracuse, CCVI[I]I years: *Ch*[*ar*]*es* being Archon at Athens. *Epicharmus* the poet lived also at this time - - 472
57. Since *Sophocles* [the son] of *Sophillus*, who was of Colonus, (about ten stadia from Athens, Thucyd. 8, 67) gained the victory in tragedy, being XXVIII years of age, CCVI years: *Apsephion* being Archon at Athens - - - - - - - - - 470
58. Since the stone fell in Ægos-potamus; and Simonides the poet died, having lived XC years, CCV years: *Theagenidas* being Archon at Athens - 469
59. Since *Alexander* died, and his son *Pe*[*r*]*diccas* reigns over the Macedonians, CXCV[III] years: *Euthippus* being Archon at Athens - - 462
60. Since *Æschylus* the poet, having lived LXIX years, died at [Gel]a in [Si]cily, CXCIII years: *Call*[*i*]*as* the first being Archon at Athens - - - 457

B. C.

61. Since *Euripides*, being XLIII years of age, first gained the victory in tragedy, CLX[XIX] years: *Diphilus* being Archon at Athens. With *Euripides*, *Socrates* and [*Ana*]*xagoras* were contemporaries - [443]
62. Since *Archelaus* reigned over the Macedonians, *Perdiccas* being dead, C[LVI] years: *Astyphilus* [being Arch]on at Athens - - - - - - [420]
63. Since *Dionysius* became tyrant of Syracuse, CXLIV years: *Euctemon* being Archon at Athens - - 408
64. Since *Euripides*, having liv[ed LXXVII years, di]ed, CXL[III] years: *Antigenes* being Archon at Athens - - - - - - - - - 407
65. Since *So*[*ph*]*ocles* the poet, having lived [XC]I years, died, and *Cyrus* we[nt up into Persia, against his brother,] CXLII years: *Callias* the first being [Ar]chon at Athens - - - - - - - 406
66. Since *Telestes* the Seli[nuntian ga]ined the prize at Athens, CXXX[VIII] years: *Micon* being Archon at Athens - - - - - - - - 402
67. Since [those returned] who went up [wit]h *Cyrus* [into Persia,] and *Socrates* the philosoph[e]r, [having lived] LXX years, died, CXXXV[I] years: *Laches* being Archon at Athens - - - - - 400
68. Since *A*[*stydamas* first taught] at Athens, CXXXV years: *Aristocrates* being Archon at Athens - - 399
69. Since *X*[*anthus*, a poet of Sard]is, gained the victory in dithyrambics, C . . . years: . . . . . being Archon at Athens - - - - - - - - . . .
70. [Sin]ce *Philoxenus*, a writer of dithyrambics, having lived LV years, dies, CXVI years: *Pytheas* being Archon at Athens - - - - - - 380
71. Since *Anaxandrides*, the comic [poet, gained the victory at Athens, CXIII years:] *Calleas* [being Archon] at Athens - - - - - - - 377
72. Since *Astydamas* gained the victory at Athens, CIX years: *Asteius* being Archon at Athens. Then also [the great light] (or comet) blazed [in the sky.] - . . .
73. [Since the battle at *Leuctra*] was fought between the Thebans and Lacedæmonians, in which the Thebans conquered, CVII years: *Phrasiclides* being

		B. C.
	Archon at Athens. [At this time, *Alexander*, the son of *Amyntas*] reigns [ovér the Macedonians]	371
74.	Since *Stesichorus* the Himerian, the second of [that name,] gained the victory at Athens; and Megalopol [is in Arcadia,] was built, [CVI years: *Dyscinetus* being Archon at Athens.] - - -	[370]
75.	Since *Dionysius*, the Sicilian, died, and his son *Dionysius* became tyrant, and *Ale*[*xa*]*n*[*der* being dead, *Ptolomy* rei]gns [over the Macedonians,] CIV years: *Nausigenes* being Archon at Athens -	368
76.	Since the *Phoceans* [plundered the temple] of Delphi, [XCIV years:] *Cephisodorus* [being Archon at Athe]ns - - - - - - -	358
77.	Since *Timotheus*, having lived XC years, died; [and *Philip*, the son of *Amyntas*,] reigns [over the Ma]-cedonians; and *Artaxerxes* died; and *Ochus* his son r[eigns over the Persians; and] ...... gained the victory; XCIII years: *Agathocle*[*s*] being Archon at Athens - - - - - - -	357
78.	[Since *Alexander*, the son of *Philip*, was bo]rn, XCI years: *Callist*[*ratus*] being Archon at Athens. .... [*Aristotle* the philo]sopher lived also at that [time] - - - - - - - -	355
79.	Since *Ca*[*lippus*, having slain *Dion*, became tyrant of Syracuse, XC year]s: [*Diotimus* being Archon at Athens] - - - - - - - -	354

* * *

TABLE XIII.

RECTIFICATION OF THE PARIAN CHRONICLE.

I. Period.

1.	*Cecrops*, first king of Athens, began to reign -	1558
2.	*Deucalion* reigns in Lycoria, near *Parnassus*, in the ninth year of *Cecrops* - - -	1549
3.	Trial of *Mars* at the *Areopagus*, for killing *Halirrhothius*, the son of *Neptune*, in the second year of *Cranaus* - - - - - -	1507

	B. C.
4. *Deucalion's* flood, flight to Athens, and sacrifice, in the fourth year of *Cranaus* - -	1504
5. The *Amphictyons* collected by *Amphictyon*, son of *Deucalion*, and their assembly at *Thermopylæ*, in the third year of *Amphictyon*, king of Athens	1497
6. The Greeks, called *Hellenes*, from *Hellen*, son of *Deucalion*, and king of *Phthiotis*, in the fourth year of *Amphictyon* - - - -	1496
7. The *Cadmia*, or citadel at *Thebes*, built by *Cadmus*, the son of *Agenor*, who came from *Phœnicia*, in the sixth year of *Amphictyon* -	1494
8. [*Eurotas* and *Lacedæmon*] reign in *Laconia*, in the ninth year of *Amphictyon* - -	1491
9. Flight of *Danaus* and his fifty daughters, from Egypt to *Lyndus*, in *Rhodes*, in the fourth year of *Erichthonius* - - - -	1486
10. *Erichthonius* institutes the chariot-race at the first celebration of the *Panathenean* games, in the ninth year of his reign - - -	1481
11. *Minos* the First reigns in *Crete;* iron found there by the *Dactyli*, in the [thirty third] year of *Pandion* - - - - - -	[1407]
12. *Ceres* teaches the sowing of corn at *Athens*, and	
13. *Triptolemus* at *Eleusis*, in the sixteenth year of *Erichtheus* - - - - - -	1384
14. The poem of *Orpheus*, on the rape of *Proserpine*, published in the twenty-sixth year of *Erichtheus*	1374
15. The *Eleusinian* mysteries celebrated by *Eumolpus*	....
16. The Lustration first instituted, in the ninth year of *Pandion* II. - - - - -	1301
17. The Gymnastic games instituted at *Eleusis* -	....
18. The *Lycean* rites instituted in *Arcadia*, in the —— year of *Pandion* II. - - - - -	....
19. Since *Hercules* [was initiated in the *Eleusinian* mysteries] in the [first] year of *Ægeus* -	[1284]
20. A tribute of youths and virgins imposed on the *Athenians*, according to the Oracle, by *Minos* II. king of *Crete*, in the fifteenth year of *Ægeus*	1270
21. *Theseus* collected the inhabitants of *Attica* to *Athens*, and instituted a popular government in the second year of his own reign - -	1234

	B. C.
22. First celebration of the festival called Ammon, in the fifth of *Theseus* - - - -	1231
23. Since the [Nemean] games were instituted at Athens, in the tenth year of *Theseus* - -	1226
24. The expedition of the Greeks against *Troy*, in the thirteenth year of *Menestheus* - -	1193
25. *Troy* taken by the Greeks in the twenty-second year of *Menestheus*, and twenty-fourth day of the month Thargelion - - -	1184
26. Since the trial of *Orestes* for killing *Ægisthus*, at the *Areopagus*, in the second year of *Demophon*	1181
27. *Teucer* founds *Salamis* in *Cyprus*, in the sixth year of *Demophon* - - - -	1177
28. *Athenian* colonies planted in *Ionia* by *Neleus*, &c. namely, *Ephesus*, *Erythræ*, *Clazomenæ*, &c. in the eighth year of *Acastus*, according to *Eusebius*, and in the 140th year after the destruction of *Troy*, according to *Eratosthenes* -	1043
29. *Hesiod*, the poet, flourished in the [fourth] year of *Megacles*, the perpetual Archon - -	[919]
30. *Homer*, the poet, flourished in the ninth year of *Diognetus*, the perpetual Archon - -	884
31. *Phidon*, king of the *Argives*, coined silver money at *Ægina*, in the twenty-third year of *Diognetus*	870

II. Period.

32. *Græcian* colonies planted in *Sicily* by *Archias*, the Corinthian, at *Syracuse*, &c. in the twenty-first year of *Æschylus*, the perpetual Archon	758
33. *Creon*, the first of the annual Archons - -	684

N. B. These two dates are perfectly correct, and so are the remaining dates, for the most part: it is therefore unnecessary to repeat them. Next follows Table XIV. by comparing which with Table XII. this Table XIII. was constructed.

TABLE XIV. ATHENIAN KINGS AND ARCHONS.

Kings.

		Y.	B.C.			Y.	B.C.
1.	Cecrops	50	1558	10.	Theseus	30	1236
2.	Cranaus	9	1508	11.	Menestheus	23	1206
3.	Amphictyon	10	1499	12.	Demophon	33	1183
4.	Erichthonius	50	1489	13.	Oxyntes	12	1150
5.	Pandion	40	1439	14.	Aphidas	1	1138
6.	Erichtheus	50	1399	15.	Thymœtes	8	1137
7.	Cecrops II.	40	1349	16.	Melanthius	37	1129
8.	Pandion II.	25	1309	17.	Codrus	21	1092
9.	Ægeus	48	1284		Interregnum	1	1071

Perpetual Archons.

1.	Medon	20	1070	8.	Pherecles	19	865
2.	Acastus	36	1050	9.	Ariphron	20	846
3.	Archippus	19	1014	10.	Thespieus	27	826
4.	Thersippus	41	995	11.	Agamestor	20	799
5.	Phorbas	31	954	12.	Æschylus	23	779
6.	Megacles	30	923	13.	Alcmeon	2	756
7.	Diognetus	28	893				

Decennial Archons.

1.	Charops	10	754	5.	Leocrates	10	714
2.	Æsimedes	10	744	6.	Apsandrus	10	704
3.	Clidicus	10	734	7.	Elyxias, or Eryxias	10	694
4.	Hipponeus	10	724				

Annual Archons.

		B.C.			B.C.
Creon		684	Miltiades	*Pausan.*	659
* *			* *		
Lysias	*Par. M.*	682	Dropsilus	*Par. M.*	645
Tlesias		681	* *		
* *			Epenetius	*Antigon.*	635
Leostratus		671	* *		
* *			Draco	*Euseb.*	624
Autosthenes	*Pausan.*	668	* *		
* *			Henochides		616
Archimedes	*Pausan.*	664	* *		
* *			Aristocles	*Par. M.*	605

	Name	Authority	B.C.
	Critias		604
	* *		
	Megacles	*Plut.*	600
	* *		
	Philombrotus	*Plut.*	595
	Critias I.	*Par. M.*	594
	Dropides	*Philostrat.*	593
	Eucrates	*Diogen.*	592
	Simon	*Par. M.*	591
	* *		
	Phænippus		588
	* *		
	Damasius II.	*Par. M.*	582
	* *		
	Pentathlus		580
	* *		
	Archestratides	*D. Hal.*	577
	* *		
	Aristomenes	*Diogen.*	570
	* *		
	Comias		566
	* *		
	Hippoclides	*Marcell.*	562
	Comias	*Par. M.*	561
	Hegesistratus	*Plut.*	560
	* *		
†	Euthydemus	*Par. M. Laer.*	556
	* *		
	Erxiclides	*Paus.*	548
	* *		
	Alcæus I.	*Par. M.*	537
	Athenæus		536
	Hipparchus		535
	* *		
	Heraclides		533
	* *		
	Miltiades	*D. Hal.*	524
	* *		
	Clisthenes	*Par. M.*	512
	* *		
†	Lysagoras	*Par. M.*	508
	Isagoras	*D. Hal.*	508
	* *		
	Acestorides	*D. Hal.*	504
	* *		
	Myrus	*D. Hal.*	500
	* *		
	Hipparchus	*D. Hal.*	496
	Pythocrates	*Par. M.*	495
	Philippus	*Schol. Soph.*	494
	Themistocles	*Sigon.*	493
	Diognetus	*D. Hal.*	492
	Hybrilides	*Dion*	491
	Phænippus	*Plut.*	490
†	Aristides	*Par. M. Plut.*	489
	Anchises	*D. Hal.*	488
	Phænippus		487
	Philocrates	*Par. M.*	486
	Phædon		485
	Leostratus	*D. Hal.*	484
	Nicodemus	——	483
	Achepsion	*Laert.*	482
†	Calliades	*Herod. Par. M.*	481
	Callias	*Diod.*	480
	Xantippus	——	479
	Timosthenes	——	478
	Adimantus	——	477
	Phædon	——	476
	Dromoclides	——	475
	Acestorides	——	474
	Menon	——	473
†	Chares	*Par. M. D. Hal.*	472
	Praxiergus	*D. Hal.*	471
	Apsephion	*Par. M.*	470
	Phædon	*Diod.*	469
†	Theagenidas,	*Par. M. D. Hal.*	468
	Lysistratus	*Diod.*	467
	Lycanias	——	466
	Lysitheus	——	465
	Archidemides	*D. Hal.*	464
	Euthippus	*Par. M.*	463
	Conon	*Diod.*	462
†	Euhippus	*Par. M. Diod.*	461
	Phrasiclides	*Diod.*	460
	Philocles	——	459
	Bion	——	458
	Callias I.	*Par. M.*	457
	Callias	*Diod.*	456
	Sosistratus	——	455
	Ariston	——	454
	Lysicrates	——	453
	Chæriphanes	*D. Hal.*	452
	Antidotus	——	451
	Euthydemus	*Diod.*	450
	Pediæus	*D. Hal.*	449
	Philiscus	——	448

			B.C.
	Timarchides	Diod.	447
	Callimachus	——	446
	Lysimachides	——	445
	Praxiteles	D. Hal.	444
	Lysanias	Diod.	443
†	Diphilus	Par. M. Diod. D. Hal.	442
	Timocles	Diod.	441
	Myrichides	——	440
	Glaucides	——	439
	Theodorus	——	438
	Euthymenes	——	437
	Lysimachus	——	436
	Anchilochides	——	435
	Chares	——	434
	Apseudes	——	433
	Pythodorus	——	432
	Euthydemus	——	431
	Apollodorus	——	430
	Epaminon	——	429
	Diotimus	——	428
	Euclides	——	427
	Euthydemus		426
	Stratocles	Diod.	425
	Isarchus	——	424
	Amynias	——	423
	Alcæus	——	422
	Aristion	——	421
†	Astyphylus	Par. M. Diod.	420
	Archias	Diod.	419
	Antipho	——	418
	Euphemus	——	417
	Aristomnestrus	——	416
	Chabrias	——	415
	Pisander	——	414
	Cleocritus	——	413
	Callias	——	412
	Glaucippus	——	410
†	Euctemon	Par. M. Diod.	408
†	Antigenes	——	407
†	Callias	——	406
	Alexias	Diod.	405
	Pithodorus	——	404
	Myco	Par. M.	403
	Euclides	Diod.	402
	Xenenetus	Diog. in Xenoph.	401
†	Laches	Par. M. Diod.	400
†	Aristocrates	——	399

			B.C.
	Ithycles	Diod.	398
	Lysiades	——	397
	Phormio	——	396
	Diophantus	——	395
	Eubulides	——	394
	Arches	——	393
	Philocles	——	392
	Nicoteles	——	391
	Demostratus	——	390
	Antipater	——	389
	Pyrrhio	——	388
	Theodotus	——	387
	Mystichides	——	386
	Dexitheus	——	385
	Diotrephes	——	384
	Phanostratus	——	383
	Menander	——	382
	Demophilus	——	381
†	Pytheas	Par. M. Diod.	380
	Nicon	Diod.	379
	Nausinicus	——	378
†	Calleas	Par. M. Diod.	377
	Chariander	Diod.	376
	Hippodamus	——	375
	Socratides	——	374
†	Asteius	Par. M. Diod.	373
	Aristæus	Aristot.	373
	Alcesthenes	Diod.	372
†	Phrasiclides	Par. M. Diod.	371
	Dysnicetus	Diod.	370
	Lysistratus	——	369
†	Nausigenes	Par. M. Diod.	368
	Polyzelus	Diod.	367
	Cephisodorus	——	366
	Chion	——	365
	Timocrates	——	364
	Chariclides	——	363
	Molio	——	362
	Nicophemus	——	361
	Callimedes	——	360
	Eucharistus	——	359
†	Cephisodorus	Par. M. Diod.	358
†	Agathocles	——	357
	Elpinous	Diod.	356
†	Callistratus	Par. M. Diod.	355
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Thessalus	*Diod.*	351
Apollodorus	——	350
Callimachus	——	349
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Aristophon	——	330
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Chremes	——	327
Anticles	——	326
Sosicles	——	325
Hegesias	——	324
Cephisodorus	——	323
Philocles	——	322
Apollodorus	——	321
Neæchmus	——	320
Apollodorus	——	319
Archippus	——	318
Demogenes	——	317

		B.C.
Democlides	*Diod.*	316
Praxibulus	——	315
Nicodorus	——	314
Theophrastus	——	313
Polemo	——	312
Simonides	——	311
Hieromnemon	——	310
Demetrius Phal.	——	309
Charinus	——	308
Anaxicrates	——	307
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Xenippus	——	305
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REMARKS ON THE CHRONICLE.

The Parian Chronicle was engraved on a coarse kind of marble, or stone, five inches thick, which, when *Selden* viewed it, at first measured 3 feet 7 inches by 2 feet 7. The top was imperfect, the lower corner on the right hand having been broken off, and the right-side measured only 2 feet 11 inches. It contained, at that time, ninety-three lines, reckoning the imperfect ones, and might originally, perhaps, have contained a hundred.

Upon an average, the lines consist of 130 letters, all capitals, in close continuation, unbroken into words, like the oldest Greek manuscripts: the ancient curtailed form of the *Pi*, Γ, is observed; the prostrate *Eta*, ⌶, is used for the *Zeta;* and there are some smaller capitals, particularly the *Omicron*, *Omega*, and *Theta*, intermixed with the larger; and the whole possesses that plainness and simplicity, which are among the surest marks of antiquity, bearing a general resemblance, but not a servile imitation, of the most authentic monuments about the same date; of which, perhaps, it most nearly resembles the *Marmor Cyzicenum*, at *Venice*, in the forms of the letters. See a fac-simile of the characters, and of the stone itself, in *Hewlett's* Vindication, p. 50.

The following is a specimen of the mode of writing:—

——————ΑΦΟΥΟΙ . . . . . ΝΕΣΕΙΣΤΡΟΙΑΝΕ
. . ΡΑΤΕΥΣ . . . . ΕΤΗ𐅅ΗΗΗΗ𐅄ΙΙΙΙΒΑΣΙΛΕΥΟΝΤΟ
ΣΑΘΗ . . . . ΕΣΘΕΩΣΤΡΕΙΣΚΑΙΔΕΚΑΤΟΥΕΤΟΥ
ΣΑΦΟΥΤΡΟΙΑΗΛΩΕΤΗ𐅅ΗΗΗΗΔΔΔΠΒΑΣΙΛΕΥΟΝΤΟΣΑ
ΘΗΝΩΝ . . . . ΩΣΔΕΥΤΕΡΟΥΕΤΟΥΣΜΗΝΟΣΘ . .
. . . . . ΝΟΣΕΒΔΟΜΗΙΦΘΙΝΟΝΤΟΣ.

The same, in modern Greek letters, divided into words, and the lacunæ supplied:—

—————— *'Αφ' ού οἱ* [*Ελλην*]*ες εις Τροιαν ε*[*στρ*]*ατευσ* [*αυτο*] *ετη* DCCCCLIV· *βασιλευοντος Αϑη*[*νων Μεν*]*εσϑεως τρεις και δεκατου ετους. 'Αφ' ού Τροια ἡλω ετη* DCCCCXLV, *βασιλευοντος Αϑηνων* [*Μενεσϑε*]*ως, δευτερου ετους, μηνος Θ*[*αργηλιω*]*νος ἑβδομῃ φϑινοντος.*

The mode of numeration employed in the Chronicle, of expressing the dates of events by the initial letters of the words denoting the numbers, I, denoting *εις*, *one*, anciently written *ἱς*; Π, *πεντε*, *five;* Δ, *δεκα*, *ten;* H, the aspirate, in *ἑκατον*, *one hundred;* and by combination 𐅄, or Π multiplied by Δ, *fifty;* 𐅅, or Π multiplied by H, *five hundred;* which is not found in the most ancient books and manuscripts, is one of the most certain and unequivocal marks of its antiquity, and also of its country, then subject to the Athenians: for it was an *Attic* mode of numeration used in *Solon's* time, and is mentioned only perhaps by *Herodian*, who represents it as obsolete, in his little treatise *περι αριϑμων* "*of numeration*," of which a fragment is preserved in the fourth volume of *Stephens's* Greek Thesaurus, p. 205—208.

See *Hewlett*, p. 46, and his answers to some Critical Strictures, p. 7, 8.

The author of four dissertations subjoined to the Septuagint version of *Daniel*, printed at Rome, in 1772, ascribes the Parian Chronicle to *Demetrius Phalereus*, as its author. The name is unluckily defaced at the beginning of the inscription, and he thus ingeniously supplies the lacunæ:—

[Δημητριος ὁ Φανοστρατ] ου [Φαληρευς, εκ των συ]μπαν[των ὑπαρχοντ]ων [χρο]νων ανεγραψα, &c.

It is true, indeed, that the classical purity of the style, the great variety of minute and miscellaneous information, in so short a compass, not only respecting the principal facts in some of the most important eras of Greece, but also marking the progress of civilization and science, by fixing the dates of the most eminent legislators, poets, and philosophers, all evince considerable learning and research, and local knowledge, in the compiler of the Chronicle, joined to the labour and expense of the engraving, which evidently prove that he could neither have been a mean nor illiterate individual, but rather some citizen, distinguished for his fortune and talents; yet it is not probable, that *Demetrius*, however the description may suit him in other respects, was the author, from the mention of *Astyanax*, the Parian Archon, as observed before, which, though highly proper, if the Chronicle was the production of a native, would surely be irrelevant, were he an *Athenian* himself, or governor of *Athens*. And *Paros* was one of the most flourishing and opulent of the *Cyclades*, and therefore likely to possess such citizens.

And, indeed, the most rational solution, perhaps, of the *silence* of subsequent classical writers respecting this curious Chronicle, (which is the principal argument urged to impeach its genuineness) may be derived from its insular and secluded situation. Even the *Smyrnæan* league itself, though a public record of considerable notoriety and importance in history, is equally unnoticed by subsequent historians, and yet its authenticity is unquestioned.

The inscription in general, so far as is legible, may be considered as accurately engraved, which is no slight recommendation of its merit and utility, considering the difficulty of the task. Still, however, it exhibits occasional errors: such, probably, are those usually reputed *archaisms*, of εγ, for εν or εκ; εμ for εν;

αμ for *αν*; *τομ* for *τον*; *τημ* for *την*, &c. because these words are in general written correctly; and in the foregoing specimen, epoch 25, there is a gross omission of *εικοστου και*, before *δευτερου*; because *Troy* was taken, not in the "*second*," but in "the *twenty-second* year of the reign of *Menestheus*," as is evident from the preceding paragraph, which dates the expedition against *Troy* "in the *thirteenth* year of his reign." This latter clause is also erroneously introduced again verbatim in *Selden's* edition of the inscription, epoch 28. It is true, *Chandler* proposes a different conjectural reading of the clause; namely, *βασιλευοντος Αθηνων Μεδοντος τρεις και δεκατου ετους*, substituting the perpetual Archon *Medon* for *Menestheus;* but this is inadmissible: for, 1. He could have no access to the marble itself for revision, which, since *Selden's* time, has been destroyed and lost, as low down as epoch 31. 2. By the ensuing rectification of the *heroic* period of the Chronicle, it appears that the 28th epoch corresponded to the eighth year of *Acastus*.

CONSTRUCTION OF THE CHRONICLE.

From the foregoing specimen, epoch 24 and 25, it is obvious, that the Chronicle was constructed upon two distinct and independent principles of computation. The former *Analytic*, reckoning upwards from B.C. 264, the fixed date or radix, at the bottom; the latter *Synthetic*, reckoning downwards from the reign of *Cecrops*, through the succeeding kings, and perpetual, decennial, and annual Archons. The former was an ingenious and compendious mode of reckoning, by adding to the fixed date, successively, supplemental numbers, expressed shortly by numeral letters. This was, probably, the invention of the compiler of the Chronicle, to save labour and expense in engraving it. The other, however, was the original mode employed by the authors from whose works the Chronicle was taken. And that this was the compiler's design, is evident from the omission of the years of each reign, for the most part, which, in the present epochs, so fortunately preserved, are expressed in words at full length, and took up much room.

It is observable, and has been remarked by *Selden*, and by all the editors of the Chronicle, that there is a difference of about 25 years between the two methods of computation; and that this difference is not accidental, but designed, running uniformly

through all the dates of the *heroic* period, from *Cecrops* to the destruction of *Troy;* whereas, in the second or *historic* period, (according to the division here introduced, on *Selden's* authority,) the two methods agree to the end.

The cause of this systematic difference has not been explained, nor even attempted to be explained, by any of the writers upon the Chronicle that have come to my knowledge. Nor will I presume to erect the following conjecture into certainty. Still, however, I flatter myself it will not be adjudged altogether fanciful or unfounded by those candid and skilful readers, who are most willing and most able to appreciate the profound difficulty and obscurity of the subject, in traversing "the dark backward, and abyme of Time."

In order to prepare the way for this investigation, the first step necessary, was to construct a Table of the reigns of the Athenian kings, from *Codrus* downwards, which should critically correspond with the Chronicle, and give the precise year denoted by the twenty-second of *Menestheus*, in which *Troy* was taken. Such a table is, I trust, the XIVth, collected from careful comparison of the Chronicon of *Eusebius*, *Petavius*, *Helvicus*, *Playfair*, &c. with the *Chronicle* itself; by means of which, I at length discovered, that the twenty-second of *Menestheus* corresponded to the year B.C. 1184, the very year assigned for the taking of *Troy* by *Apollodorus*, and the Greek Chronographers in general; and, consequently, that the Chronicle, in its primitive mode of computation by reigns, established the received date of this leading epoch of Greek chronology.

In constructing this Table, I ascended from the fixed date of the appointment of annual Archons, B.C. 684, according to *Prideaux* and *Playfair;* and this process gave the commencement of the reign of *Cecrops*, B.C. 1558, the same year assigned by *Petavius* from *Eusebius*. And that it was rightly assigned may be collected from the following considerations:—

1. *Castor*, of Rhodes, who flourished about B.C. 50, reckoned that *Cecrops* began his reign 780 years before the first Olympiad, B.C. 776, or B.C. 1556, two years later. This date is adopted by *Usher*.

2. *Isagoras*, the orator, born B. C. 436, reckoned that "not less than 1000 years had intervened from the first settlement of the Athenian polity by *Cecrops*, till its subversion by *Pisistratus*, B. C. 561. This would give the accession of *Cecrops*,

B. C. 1561, or three years earlier. Whence we are warranted to assume the mean date, B. C. 1558, as correct.

3. This is confirmed by the Chronicle itself:—

By the former method of computation, from the accession of *Cecrops*, B. C. 1582, to the destruction of Troy, B. C. 1209, was an interval of 373 years; but precisely the same interval results by the latter, from the first of *Cecrops*, B. C. 1558, to the twenty-second of *Menestheus*, B. C. 1185. Consequently, B. C. 1558, must have been the specific date upon which the table of reigns, adapted to the Chronicle, was originally constructed.

There appears, at first sight, a slight difference between the twenty-second of *Menestheus*, B. C. 1185, and the received date of the capture of *Troy*, B. C. 1184. But this is only apparent, depending on the different commencement of the *Attic* year, about the Summer solstice. *Troy* was taken, according to the Chronicle, on the 24th of *Thargelion*, or 26th of May, near the end of that Attic year, which therefore began in the Julian year, B. C. 1185, and ended in the succeeding, B. C. 1184. And the critical accuracy of the Chronicle, and correctness of the conjectural reading *Thargelion*, are vouched by *Dion. Hal.* who states, that " *Troy* was taken near the end of the Spring, seventeen days before the Summer solstice, on the 23d of *Thargelion*, according to the *Attic* reckoning."

The same is confirmed by poetical authority:

> Et Danaum *decimo vere* redisse rates.—*Propert.* IV.
>
> ——— vix *prima* inceperat *æstas*,
> Et pater Anchises dare fatis vela jubebat.—*Virg. Æn.* III.

Here *Propertius* states that the Grecian fleet returned in the *Spring* of the tenth year of the siege; and *Virgil*, that *Æneas* set sail, soon after, at the very beginning of *Summer* ensuing.

But how are we to account for this systematic difference between the two methods, of about 25 years, which pervades the upper part of the Chronicle, but vanishes in the lower, where both methods agree?

The leading date of the first period appears to be that of the capture of *Troy*, the established date of which, B. C. 1184, is furnished by the latter method of computation by reigns. But the compiler of the Chronicle, rejecting this date, adopted the earlier, of B. C. 1209, probably on the authority of authors that rated it higher, such as *Dicæarchus*, a celebrated historian and

philosopher, of the *Aristotelian* school, who flourished B. C. 310. or about 50 years before the Chronicle was engraved, and reckoned that Troy was taken, B. C. 1212, three years sooner. Whence the compiler found it necessary to raise all the other dates of this period by the same difference of 25 years; and by so doing, has proved the inaccuracy of his assumed date, B. C. 1209; because several of the earlier epochs are thereby thrown out of their proper places an entire reign backwards. Thus, epoch 21, the political reform of *Theseus*, which, by the table of reigns adapted to the latter method, happened B. C. 1234, in the second year of his reign, as confirmed by the testimony of *Plutarch*, and others, that he began his reform soon after his accession to the throne, is thrown back by the former method to B. C. 1259, the twenty-fourth year of the reign of his father *Ægeus!*

That the dates of the reigns, Tab. XIV. are rightly assigned, is confirmed also by another epoch, 32; in which, though the supplementary number is obliterated, yet "the twenty-first year of" the perpetual Archon "*Æschylus*" is fortunately preserved, which was B. C. 758. But *Eusebius* dated the foundation of *Syracuse* twenty-four years before the accession of the decennial Archon *Clidicus*, in B. C. 734, which, added thereto, gives the same result, B. C. 758, and corrects a slight error in *Selden*, p. 1514, who cites this testimony of *Eusebius*, and yet dates the epoch, B. C. 757, a year later.

This epoch, with which the *historical* or second period of the Chronicle begins, is of considerable importance:

1. It verifies the next epoch, 33, by reckoning downwards, and fixes the establishment of annual Archons in B. C. 684. 2. It also detects an error in *Petavius*, adopted by *Playfair*, that the decennial Archonship expired with *Eryxias*, B. C. 687, three years earlier; in consequence of which, the latter has unwarrantably deducted two years from the decennial Archon *Charops*, and one year from *Æsimedes*, in order to fix the accession of the first decennial Archon *Charops*, in B. C. 754, which he rightly does, following *Prideaux*. It is to be regretted, indeed, that this excellent chronologer did not adduce his authorities in the first edition of his useful work; and it is to be hoped that he will remedy this defect in the next, which is now in contemplation. 3. *Selden* judiciously observes, that this epoch furnishes an important adjustment of the dates of the succeeding

colonies, after *Syracuse*, which settled at *Naxos*, *Catana*, *Trotilus*, &c. and are noticed in the beginning of the sixth book of *Thucydides*.

We are now warranted, upon the high authority of the Parian Chronicle, to consider the thirty reigns of the Athenian kings and archons, from *Cecrops* to *Creon*, the first annual archon, as one of the most authentic and correct documents to be found in the whole range of Profane Chronology; while the Chronicle also verifies the broken list of annual archons, as far as it reaches downwards, by confirming, in near twenty instances, the dates assigned by other historians, both earlier and later.

We are also enabled to adjust that much disputed epoch of the time of *Homer* with a high degree of precision. *Diognetus*, in whose archonship he flourished, epoch 30, did not begin to reign till B. C. 893; consequently, the date B. C. 907, furnished by the supplemental number, which is perfect, must be erroneous: if then we reduce it to B. C. 884, the ninth year of *Diognetus*, we shall find it confirmed by the important testimony of *Herodotus*, who declares, that " *Hesiod* and *Homer* lived *not above* four hundred years before his time." B. 2. 53. *Herodotus* was born B. C. 484, which, added to 400, gives B. C. 884.

The supplemental number in the epoch of *Hesiod* 29, is imperfect, DCLXX . . *Selden* supplies the chasm with another X, and so makes it 680; but *Prideaux*, with II, reducing it to 672, which also reduces the epoch to B. C. 936, and so leaves a difference of 52 years between the poets, which is still too much. But if we further deduct the systematic difference of 25 years, it will reduce *Hesiod's* time to B. C. 911, and leave an interval of only 27 years between them.

The conjectural date assigned to epoch 28, of the *Ionic* migration, B. C. 1077, by *Selden*, and followed by his successors, requires to be lowered in the same proportion. For *Eusebius* states, that this migration took place in the eighth year of the Athenian king *Acastus*, which, according to his Canon, was B. C. 1043; and *Eratosthenes* dated it 140 years after the destruction of Troy, which he reckoned B. C. 1183, furnishing the same year, B. C. 1043. And this rectification critically corresponds with the account of *Thucydides*, who, in his curious and valuable summary of the ancient state of Greece, antecedent to the *Peloponnesian* war, B. 1, dates the return of the *Heraclidæ* to Peloponnesus, 80 years after the destruction of *Troy;* and he

describes the planting of *Ionia*, and several of the islands, as "a *good while after* their return," which agrees very well to 60 years after.

CORRECTIONS OF THE CHRONICLE.

Besides the general rectification of the first period, Table XIII. there are some epochs in the second that require correction.

Epoch 36, B. C. 605, cannot be understood of the first year of the reign of *Alyattes*, which began B. C. 619. It probably refers to the time of his war with *Cyaxares*, king of Media, which was put an end to by the celebrated eclipse of *Thales*, two years after, B. C. 603.

Epoch 42, B. C. 556. This was the fifth year of the reign of *Crœsus*, and refers perhaps to his first inquiry concerning his son who was dumb; to which the Oracle replied, that *in an evil day he should hear his son speak!* which was afterwards verified at the surprise of *Sardis* by *Cyrus;* when the son, alarmed for his father's life, eagerly exclaimed to the Persian soldier, "*Kill not Crœsus!*"

Epoch 43. The supplemental number being obliterated, we may supply B. C. 548, the correct date of the capture of *Crœsus.* This corresponds with the sequel: for *Hipponax*, his contemporary, flourished in the 63d Olympiad, B. C. 528, according to *Pliny;* and *Crœsus* survived *Cyrus*, who died B. C. 529, and lived in the reign of *Cambyses.*

Epoch 45. The conjectural date B. C. 517, furnished by *Selden*, supposing that the last three letters of the supplemental number were III. is raised by *Prideaux*, to B. C. 520, substituting III, or VI. And this probably was the actual year of the accession of *Darius* I. after the death of *Smerdis Magus*, and also after the short reigns of *Maraphis* and *Artaphrenes*, noticed by *Æschylus*, which might altogether have taken up a year or more; but which, according to the construction of *Ptolomy's* Canon, are assigned to *Darius*, in dating his reign B. C. 521, or are included in his first year. See the ensuing article of *Ptolomy's* Canon.

Epoch 50. The conjectural date of the death of *Darius*, B.C. 490, is incorrect, however it be filled up, for it comes before B.C. 486, in the next epoch; but *Xerxes* succeeded *Darius* in B.C. 485, according to the Canon.

Epoch 52, 53. These dates are each a year too high.

Epoch 55. The supplemental number being mutilated, the date is furnished from *Diodorus Siculus.*

Epoch 61, 62, 65, are also supplied from *Diodorus.* The last, however, is incorrect, B.C. 406; for the accession of *Artaxerxes Mnemon*, the brother of *Cyrus* the younger, was not till B.C. 404, according to the Canon.

ERAS OF IPHITUS, AND OF THE OLYMPIADS.

> Ουτ' Ολυμπιας αγωνα
> Φερτερον αυδασομεν.
>
> "Nothing better than *the Olympic games*
> Can we celebrate."—PIND. Od. 1.

These celebrated games were originally instituted in honour of *Jupiter Olympius*, by the Phrygian *Pelops*, who settled in the Grecian Peninsula, called from him *Peloponnesus*, about B.C. 1350. They were repeated by the *Theban Hercules*, about B.C. 1325, and after a long interruption, restored in part by *Iphitus*, king of *Elis*, and celebrated at *Olympia*, on the banks of the river *Alpheus*, B.C. 884, according to the most probable account. However, the Vulgar Era of the Olympiads did not commence till 108 years after, July 19, B.C. 776. From which time, they were regularly continued every four years complete, or fifth year current, and lasted for five days, on each of which were celebrated the different games of *leaping*, *running*, *throwing the discus*, *darting*, and *wrestling;* the last day fell on the first full moon after the Summer solstice, and the next day the prizes were awarded *.

Pausanias, that accurate antiquary, who flourished about A.D. 170, and had himself inspected the Olympic register at *Elis*, gives the following particular account of their gradual restoration:—

"After *Iphitus* had revived the festival in the manner above related, the memory of several ancient customs was still lost, and it was by slow degrees that men came to the remembrance of them, and added to the games whatever they happened to recollect. This is evident. For reckoning *from the time when the memorials of the Olympiads go on without interruption*, the

* Επει εν τῃ πανσεληνῃ ὁ Ολυμπιακος αγων αγεται, και τῃ εκκαιδεκατῃ γινεται κρισις. Schol. in *Pindar.* Od. 3.

first prize given was for the *foot-race*, which was won by *Coræbus*, the *Elean*. Afterwards, in the 14th Olympiad, the *Diaulos*, (or double course) was added; when *Hypenus*, of *Pisa*, bore away the olive-branch for the *Diaulos*, as did *Acanthus* in the next Olympiad. Then, in the 18th Olympiad, they recollected the *Pentathlos*, (or the five exercises) and the *wrestling*." Eliac. 1. p. 394.

The registry of the victors in the games, and consequently of the *Olympiads* themselves, or Quadriennial Cycle, the first year of which was appropriated to the celebration of the games, was carefully kept at *Elis*, and the names of the victors inserted in it by the presidents of the games. *Pausanias* found it perfect, except in the 211th Olympiad, A.D. 65, "which (says he,) is the only Olympiad omitted in the register of the *Eleans*." *Phocic.* p. 892. It was therefore a register of the most public authenticity. See *Musgrave's* Vindication of the *Olympiads*, p. 230.

Before *Pausanias*, the judicious *Strabo* had remarked, that *Coræbus* was the first victor in the Olympic games, and *Athenæus* afterwards particularly notices his profession as a cook. Lib. ix. p. 392. And the learned chronologer *Varro* justly considers the era of the Olympiads, as forming the limit between the *fabulous* and *historical* ages. These testimonies infinitely outweigh the objections of *Plutarch*, too hastily adopted by Sir *Isaac Newton*, in his Chronology, p. 47; namely, that the register of the Olympiads was published rather late, "by *Hippias*, the Elean, about the 105th Olympiad, B.C. 360, and from no certain materials."

The adjustment of this era to the Christian is fully ascertained by historical and astronomical evidence.

The learned *Censorinus*, in his excellent work, *De die natali*, cap. 21, marks the year in which he wrote it, A.D. 238, in the consulate of *Ulpius* and *Pontianus*, by its reference to some of the most remarkable eras *; and among the rest states, that it

* Secundum *Varronis* rationem, nisi fallor, hic annus cujus velut index et titulus quidem est *Ulpii* et *Pontiani* consulatus (A.D. 238.) ab *Olympiade primâ* millesimus est et quartus decimus, ex diebus duntaxat *æstivis* quibus agon Olympicus celebratur. A *Româ* autem *conditâ*, nongentesimus nonagesimus primus, et quidem ex *Parilibus*, unde Urbis anni numerantur.—Ab *Ægyptiis* quidam anni in literas relati sunt; ut quas *Nabonnazaru* nominant, quod a primo imperii ejus anno consurgunt; quorum hic nongentesimus octogesimus est: Item *Philippi* [*Aridæi*] qui ab excessu *Alexandri Magni* numerantur; et ad hunc usque perducti, annos quingenta sexaginta duos consummant: sed horum initia semper a primo die mensis ejus sumuntur, cui apud

was "the 1014th year from the first Olympiad, reckoned from the Summer days, on which the Olympic games were celebrated." But 1014—A.D. 238=B.C. 776.

Polybius relates, that in the third year of the 140th Olympiad, during the Spring, there happened two memorable battles; the former between the *Romans* and *Carthaginians*, at the lake *Thrasymene* in *Italy;* the latter between *Antiochus* and *Ptolomy*, at *Raphia*, in *Cœle-Syria*. And also, that in the course of that same year, there was an eclipse of the moon, which terrified the *Gallic* auxiliaries whom *Attalus* was bringing over from Europe, in consequence of which they refused to proceed. Lib. v. p. 442. The third year of the 140th Olympiad began July, B.C. 218, and ended July, B.C. 217; but in the former Julian year, there was a great eclipse of the moon on September 1, an hour after midnight, in which the moon was near an hour and half immersed in the earth's shadow, and which therefore was fully sufficient to terrify the ignorant and superstitious; and the battle of *Thrasymene* was fought in the next Julian year, B.C. 217, in the consulate of *Servilius Geminus* and *C. Flaminius* II. but as it was in Spring, it fell within the compass of the same Olympic year. But 139 Olympiads and two years over make 558 years, which added to B.C. 218, give B.C. 776 for the date of the first Olympiad. These demonstrative characters are furnished by *Petavius*, tom. ii. p. 56.

The following Table gives the first year of each Olympiad, and the victor in the *Stadium*, or foot-race: whence the second, third, and fourth years, are easily found.

XV. TABLE OF OLYMPIADS.

OLYM.	B.C.	OLYM.	B.C.
1. *Chorœbus*, Eliens.	776	7. *Daicles*, Messen.	752
2. *Antimachus*, Eliens	772	8. *Anticles*, Messen.	748
3. *Androcles*, Messen.	768	9. *Xenocles*, Messen.	744
4. Polychares, Messen.	764	10. *Dotades*, Messen.	740
5. Æschines, Messen.	760	11. *Leochares*, Messen.	736
6. *Oebotas*, Dumæus	756	12. *Oxythemis*, Coron.	732

Ægyptios nomen est *Thoth*, quique hoc anno fuit ante diem septimum Kal. Julias. *Censorin.* de *die natali.* cap. 21, or *Petav.* 2, p. 53. Hence,

1. Era of the *Olympiads* .... 1014—A.D. 238=B.C. 776.
2. Era of *Rome* .... 991—A.D. 238=B.C. 753.
3. Era of *Nabonassar* .... 985—A.D. 238=B.C. 747.
4. Era of *Philip* .... 562—A.D. 238=B.C. 324.

OLYM.		B.C.
13.	*Diocles*, Corinth.	728
14.	*Damon*, Corinth.	724
15.	*Orsippus*, Megar.	720
16.	*Pythagoras*, Lacon	716
17.	*Polus*, Epidaur.	712
18.	*Tellis*, Sicyon.	708
19.	*Menon*, Megar.	704
20.	*Atherades*, Lacon.	700
21.	*Pantacles*, Athen.	696
22.	*Pantacles*	692
23.	*Icarius*, Hyper.	688
24.	*Cleoptolemes*, Lacon.	684
25.	*Thalpius*, Lacon.	680
26.	*Calisthenes*, Lacon.	676
27.	*Eurybates*, Lacedæm.	672
28.	*Charmes*, Lacon.	668
29.	*Chionis*, Lacedæm.	664
30.	*Chionis*	660
31.	*Chionis*	656
32.	*Cratinus*, Megar.	652
33.	*Gyges*, Lacon.	648
34.	*Stomas*, Athen.	644
35.	*Sphærus*, Lacon.	640
36.	*Phrynon*, Athen.	636
37.	*Euryclidas*, Lacon.	632
38.	*Olyntheus*, Lacon.	628
39.	*Ripsoleus*, Laced.	624
40.	*Olyntheus*	620
41.	*Cleonidas*, Theban.	616
42.	*Lycotas*, Lacon.	612
43.	*Cleon*, Epidaur.	608
44.	*Gelo*, Lacon.	604
45.	*Anticratis*, Epidaur.	600
46.	*Chrysomaxus*, Lacon.	596
47.	*Eurycles*, Lacon.	592
48.	*Glaucias*, Croton.	588
49.	*Lycinus*, Croton.	584
50.	*Epitelides*, Lacon.	580
51.	*Eratosthenes*, Croton.	576
52.	*Agis*, Eliens.	572
53.	*Agnon*, Pepareth.	568
54.	*Hippostratus*, Croton.	564
55.	*Hippostratus*	560
56.	*Phædrus*, Pharsal.	556
57.	*Ladromus*, Lacon.	552
58.	*Diognetus*, Croton.	548
59.	*Archilochus*, Corcyr.	544
60.	*Appellæus*, Eliens.	540
61.	*Agatharcus*, Corcyr.	536
62.	*Eryxidas*, Chalcid.	532
63.	*Parmenides*, Camar.	528
64.	*Evander*, Thessal.	524
65.	*Apochas*, Tarent.	520
66.	*Ischyrus*, Himer.	516
67.	*Phanas*, Pellin	512
68.	*Ischomachus*, Croton.	508
69.	*Ischomachus*	504
70.	*Nicoras*, Opunt.	500
71.	*Tisicrates*, Croton.	496
72.	*Tisicrates*	492
73.	*Astylus*, Croton.	488
74.	*Astyllus*, Syracus.	484
75.	*Suchus*, Syracus	480
76.	*Scamander*, Mitylen.	476
77.	*Dates*, Arg.	472
78.	*Parmenides*, Post.	468
79.	*Xenophon*, Corinth.	464
80.	*Torymbas*, Thessal.	460
81.	*Polymnastus*, Cyren.	456
82.	*Lycus*, Thessal.	452
83.	*Criso*, Himer.	448
84.	*Criso*	444
85.	*Criso*	440
86.	*Theopompus*, Thessal.	436
87.	*Sophron*, Ambrac.	432
88.	*Symmachus*, Messen.	428
89.	*Symmachus*	424
90.	*Hyperbius*, Syracus.	420
91.	*Exaginetus*, Agrigent.	416
92.	*Exaginetus*	412
93.	*Eubatos*, Cyren.	408
94.	*Crocynas*, Lariss.	404
95.	*Minos*, Athen.	400
96.	*Eupolemus*, Eliens.	396
97.	*Terinæus*, Eliens.	392
98.	*Sosippus*, Athen.	388
99.	*Dicon*, Syracus	384
100.	*Dionysiodorus*, Tarent.	380
101.	*Damon*, Thuri.	376
102.	*Damon*	372
103.	*Pythostratus*, Athen.	368
104.	*Eubotas*, Cyren.	364
105.	*Porus*, Cyren.	360
106.	*Donis*, Maliens.	356
107.	*Smicrinas*, Tarent.	352
108.	*Polycles*, Cyren.	348

OLYM.	B.C.
109. *Aristolochus*, Athen.	344
110. *Anticles*, Athen.	340
111. *Cleomantis*, Clitor.	336
112. *Gryllus*, Chalcid.	332
113. *Cliton*, Macedon.	328
114. *Micinas*, Rhodius.	324
115. *Damasias*, Amphipol.	320
116. *Demosthenes*, Lacon.	316
117. *Parmeno*, Mitylen.	312
118. *Andromenes*, Corinth.	308
119. *Andromenes*	304
120. *Pythagoras*, Magnes.	300
121. *Pythagoras*	296
122. *Antigonus*, Maced.	292
123. *Antigonus*	288
124. *Philomelus*, Pharsal.	284
125. *Ladas*, Ægiacus.	280
126. *Idæus*, or *Nicator*	276
127. *Perigenes*, Alexand.	272
128. *Seleucus*, Maced.	268
129. *Philinus*, Cous.	264
130. *Philinus*	260
131. *Ammonius*, Alex.	256
132. *Xenophanes*, Ætol.	252
133. *Symilus*, Neapol.	248
134. *Alcidas*, Lacon.	244
135. *Eraton*, Ætolus.	240
136. *Pythocles*, Sicyon.	236
137. *Menestheus*	232
138. *Demetrius*	228
139. *Iolaidas*, Argiv.	224
140. *Zopyrus*, Syracus.	220
141. *Dorotheus*, Rhod.	216
142. *Crates*, Alexand.	212
143. *Heraclitus*, Sam.	208
144. *Heraclides*, Salam.	204
145. *Pyrrhias*, Ætol.	200
146. *Micion*, Boeotius.	196
147. *Agemachus*	192
148. *Acesilaus*	188
149. *Hippostratus*	184
150. *Onesicritus*, Salam.	180
151. *Thymelus*, Aspend.	176
152. *Democritus*, Megar.	172
153. *Aristander*, Lesb.	168
154. *Leonidas*, Rhod.	164
155. *Leonidas*	160
156. *Leonidas*	156

OLYM.	B.C.
157. *Leonidas*	152
158. *Orthon*, Syracus.	148
159. *Alcimus*, Cyzic.	144
160. *Diodorus*, Sicyon.	140
161. *Antipater*, Epir.	136
162. *Damon*, Delph.	132
163. *Timotheus*, Trall.	128
164. *Boetus*, Sicyon.	124
165. *Acusilaus*, Cyren.	120
166. *Chrysogonus*, Nicen.	116
167. *Chrysogonus*	112
168. *Nicomachus*, Philadelph.	108
169. *Nicomachus*, Laced.	104
170. *Simmias*, Seleuc.	100
171. *Parmeniscus*, Corcyr.	96
172. *Eudamus*, Cous.	92
173. *Parmeniscus*	88
174. ————	84
175. *Epænetus*, Arg.	80
176. *Dio*, Cyparis	76
177. *Hecatomnus*, Milet.	72
178. *Diocles*, Hypep.	68
179. *Andreas*, Laced.	64
180. *Andromachus*, Ambrac.	60
181. *Lamachus*, Tauron.	56
182. *Anthestion*, Argiv.	52
183. *Theodorus*, Messen.	48
184. *Theodorus*	44
185. *Ariston*, Thur.	40
186. *Scamander*, Alex.	36
187. *Sopator*, Argiv.	32
188. ———	28
189. *Asclepiades*, Sidon.	24
190. *Rufidius*, Patr.	20
191. *Diodotus*, Tyan.	16
192. *Diophanes*, Æol.	12
193. *Artemidorus*, Thyat.	8
194. *Damaratus*, Ephes.	4
	A.D.
195. *Damaratus*	1
196. *Pammenes*, Magnes.	5
197. *Asiaticus*, Halicar.	9
198. *Diophanes*, Prus.	13
199. *Æschines*, Miles.	17
200. *Polemon*, Petræus.	21
201. *Damasias*, Cydon.	25
202. *Hermogenes*, Pergam.	29

OLYM.	A.D.	OLYM.	A.D.
203. *Apollonius,* Epidaur......	33	206. *Valerius,* Mitylen.	45
204. *Serapion,* Alex...........	37	207. *Athenodorus,* Ægin.......	49
205. *Eubulidas,* Laod.........	41	208. *Athenodorus*	53

ERA OF THE FOUNDATION OF ROME.

This celebrated *Roman Era* succeeds next in order of time to the *Grecian.* Its adjustment to the Christian Era is also equally ascertained from History and Astronomy.

1. *Censorinus* reckoned that the year A.D. 238, in which he wrote his work, was the 991st from the foundation of Rome, by the *Varronian* computation. But 991—A.D. 238=B.C. 753. See *Petav.* tom. ii. p. 53, 69.

2. *Cicero* and *Plutarch* both relate, that on the day of the foundation of *Rome,* there was a total eclipse of the sun, which happened, according to the latter, in the third year of the sixth Olympiad, B.C. 754—3. But by astronomical calculation, there was an eclipse of the sun visible at *Rome,* B.C. 753, July 5, aft. 4½, dig. 4, agreeing in every respect except the quantity. This also adjusts the *Grecian* and *Roman* eras together. See *Cicero* de Div. lib. ii. *Plutarch* in *Romulo.*

3. *Livy* records, in the consulate of *Livius Salinator* and *Valerius Messala,* U.C. 566, a total eclipse of the sun, which, by astronomical calculation, happened B.C. 188, July 17, morn. 8h. 38m. dig. 10¾: but the sum of these years gives B.C. 754, complete, or B.C. 753, current. *Livy,* lib. xxxviii. 36.

4. *Livy* also records, that in the consulate of *Paulus Æmilius* and *Licinius Crassus,* U.C. 586, *Sulpitius Gallus,* a military tribune, predicted an eclipse of the moon to happen on the ensuing night, from the second to the fourth hour, which accordingly happened the night before the famous battle of *Pydna,* in which *Perseus,* king of Macedon, was defeated, and this encouraged the Romans, and dispirited the Macedonians. And by astronomical calculation, there was an eclipse of the moon, B.C. 168, June 21, which began, aft. 6h. 14m. and lasted four hours, 15. dig. The total immersion, or eclipse, began 7h. 32m. or in the second hour of the night, and lasted till the fourth hour, exactly agreeing with the prediction of *Gallus,* which identifies the eclipses, and shews considerable skill, on his part, at that early age. It also proves, that *Livy* was incorrect, in assigning

the night of the eclipse, *pridie nonas Septembris.* The context in the preceding chapter shews, that the season of the year was rather about the *Summer solstice.* Livy, lib. xliv. 37. But the sum of these years gives B.C. 754, complete, or B.C. 753, current, for the date of the foundation of Rome, according to the *Varronian* computation, which is infallibly established by means of these eclipses.

The following Table is continued to near the close of *Trajan's* reign :—

XVI. TABLE OF ROMAN KINGS AND CONSULS.

KINGS.

U.C.	B.C.	King	Years
1.	754.	Romulus	38
39.	716.	Numa Pompilius	43
82.	673.	Tullus Hostilius	32
114.	641.	Ancus Martius	24
138.	617.	Tarquinius Priscus	38
176.	579.	Servius Tullius	44
220.	535.	Tarquinius Superbus	25

CONSULS.

U.C.	B.C.	Consuls
245*.	509.	L. Junius Brutus *M. Horatius Pulvillus.* L. Tarq. Collatinus *P. Valerius Poplicola.*
246.	508.	P. Valerius Poplicola II. T. Lucretius Tricipitinus.
247.	507.	P. Valerius Poplicola III. M. Horatius Pulvillus II.
248.	506.	Sp. Lartius Flavus. T. Herminius Aquilinus.
249.	505.	M. Valerius. P. Postumius Tubertus.
250.	504.	P. Valerius Poplicola IV. T. Lucret. Tricipitinus II.
251.	503.	P. Postumius Tubertus II. Agrippa Menen. Lanatus.
252.	502.	Opiter Virginius Tricostus. Sp. Cassius Viscellinus.
253.	501.	Post. Comin. Auruncus. T. Lartius Flavus.
254.	500.	Serv. Sulpitius Camerinus. Man. Tullius Longus.
255.	499.	P. Veturius Geminus. T. Æbutius Elva.
256.	498.	T. Lartius Flavus II. Q. Clœlius Siculus.
257.	497.	A. Sempron. Atratinus. M. Minucius Augurinus.
258.	496.	A. Postumius Albus. A. Virginius Tricostus.
259.	495.	Ap. Claudius Sabinus. P. Servilius Priscus.
260.	494.	A. Virginius Tricost. II. T. Veturius Geminus.
261.	493.	Sp. Cassius Viscellinus II. Post. Comin. Auruncus II.
262.	492.	T. Geganius Macerinus. P. Minucius Augurinus.
263.	491.	M. Min. Augurinus II. A. Sempron. Atratinus II.
264.	490.	Q. Sulpicius Camerinus. Sp. Lartius Flavus II.
265.	489.	C. Julius Iulus. P. Pinarius Rufus.

* Refert *Censorinus, Primos Ludos Sæculares,* exactis Regibus, post Romam conditam annis 245, a *Valerio Publicola* institutos esse. Cap. 17.

CONSULS.

U.B.	B.C.	
266.	488.	Sp. Nautius Rutilus.
		Sex. Furius Fusus.
267.	487.	C. Aquilius Tuscus.
		T. Sicinius Sabinus.
268.	486.	Sp. Cassius Viscellinus III.
		Proc. Virginius Tricostus.
269.	485.	Q. Fabius Vibulanus.
		S. Cornel. Malug. Cossus.
270.	484.	L. Æmilius Mamercinus.
		C. Fabius Vibulanus.
271.	483.	M. Fabius Vibulanus.
		L. Valer. Poplic. Potitus.
272.	482.	C. Julius Iulus.
		Q. Fabius Vibulanus II.
273.	481.	C. Fabius Vibulanus II.
		Sp. Furius Fusus.
274.	480.	Cn. Manlius Cincinnatus.
		M. Fabius Vibulanus II.
275.	479.	C. Fabius Vibulanus III.
		T. Virgin. Tricost. Rutilus.
276.	478.	L. Æm. Mamercinus II.
		C. Serv. Ahala. }
		C. Corn. Lent. Esquilin. }
277.	477.	C. Horatius Pulvillus.
		T. Menenius Lanatus.
278.	476.	A. Virg. Tricost. Rutilus.
		Sp. Servilius Structus.
279.	475.	P. Valerius Poplicola.
		C. Nautius Rutilus.
280.	474.	L. Furius Medull. Rufus.
		A. Manlius Vulso.
281.	473.	L. Æmil. Mamercinus III.
		Vopiscus Julius Iulus. }
		Opiter Virginius. }
282.	472.	L. Pinarius Rufus Mamerc.
		P. Furius Fusus.
283.	471.	Ap. Claudius Sabinus.
		T. Quintius Barbatus.
284.	470.	L. Valerius Poplicola II.
		Tib. Æmilius Mamercinus.
285.	469.	A. Virgin. Tricostus.
		T. Numicius Priscus.
286.	468.	T. Quintius Barbatus II.
		Q. Servilius Priscus.
287.	467.	Tib. Æmilius Mamerc. II.
		Q. Vibulanus.
288.	466.	Sp. Postumius Albus.
		Q. Servilius Priscus II.
289.	465.	Q. Fabius Vibulanus II.
		T. Quintius Barbatus III.
290.	464.	A. Postumius Albus.
		Sp. Furius Medullinus.
291.	463.	P. Servilius Priscus.
		L. Æbutius Elva.
292.	462.	L. Lucretius Tricipitinus.
		T. Veturius Geminus.
293.	461.	P. Volumn. Amintinus.
		Serv. Sulpicius Camerinus.
294.	460.	P. Valerius Poplicola II. }
		L. Quinct. Cincinnatus. }
		C. Claudius Sabinus.
295.	459.	Q. Fabius Vibulanus III.
		L. Cornel. Malug. Cossus.
296.	458.	C. Nautius Rutilus II.
		L. Minucius Augurinus.
297.	457.	C. Horatius Pulvillus.
		Q. Minucius Augurinus.
298.	456.	M. Valerius Maximus.
		Sp. Virginius Tricost.
299.	455.	T. Romulius Rocus.
		C. Veturius Cicurinus.
300.	454.	Sp. Tarpeius Montanus.
		A. Æternius Fontinalis.
301.	453.	Sex. Quintilius.
		P. Horatius Tergeminus.
302.	452.	P. Sestius Capitolinus.
		T. Menenius Lanatus.
303.	451.	Appius Claudius Crassinus.
		T. Genucius Augurinus.

DECEMVIRS.

U.B.	B.C.	
		Appius Claudius Crassinus.
		T. Gen. Augurinus, &c.
304.	450.	Ap. Claudius Crassinus II.
		Q. Fabius Vibulanus, &c.
305.	449.	Ap. Claud. Crassinus III.
		Q. Fab. Vibulanus, II. &c.

CONSULS.

U.C.	B.C.	
		L. Valerius Poplicola.
		T. Horatius Barbatus.
306.	448.	Lar. Herminius Aquilinus.
		T. Virginius Tricostus.
307.	447.	M. Geganius Macerinus.
		C. Julius Iulus.
308.	446.	T. Q. Capit. Barbatus IV.
		Agrippa Furius Fusus.
309.	445.	M. Genucius Augurinus.
		C. Curtius Philo.
310.	444.	T. Clœlius Siculus. }
		A. Sempron. Atratinus. }
		L. Papirius Mugillanus.
		L. Sempronius Atratinus.
311.	443.	M. Geganius Macerinus.
		T. Q. Capitol. Barbat. V.
312.	442.	M. Fabius Vibulanus.
		Post. Æbutius Cornicen.
313.	441.	C. Furius Pacilus Rufus.
		M. Papirius Crassus.
314.	440.	Proc. Geganius Macerinus.
		L. Menenius Lanatus.
315.	439.	T. Quint. Capitolinus VI.
		Agrippa Menen. Lanatus.
316.	438.	M. Æmilius Mamercin.
		L. Quint. Cincinnatus.
		L. Julius Iulus.
317.	437.	M. Geg. Macerinus III.
		L. Sergius Fidenas.
318.	436.	M. Cornelius Malugin.
		L. Papirius Crassus.
319.	435.	C. Julius Iulus II.
		L. Virginius Tricostus.
320.	434.	C. Julius Iulus III.
		L. Virginius Tricostus II.
321.	433.	M. Fabius Vibulanus.
		M. Fossius Flaccinator.
		L. Sergius Fidenas.
322.	432.	L. Pinarius Rufus.
		L. Furius Medullinus.
		Sp. Postumius Albus.
323.	431.	T. Quint. Pennus Cincin.
		C. Julius Mento.
324.	430.	L. Papirius Crassus.
		L. Julius Iulus.
325.	429.	L. Sergius Fidenas II.
		Hostus Lucret. Tricipitin.
326.	428.	T. Quint. Pennus Cin. II.
		A. Cornelius Cossus.
327.	427.	L. Papirius Mugillanus II.
		C. Servilius Struct. Ahala.

MIL. TRIBUNES.

328.	426.	T. Q. Pennus Cincin. &c.
329.	425.	A. Sempronius Atratin. &c.
330.	424.	L. Horatius Barbatus, &c.
331.	423.	C. Sempronius Atratinus.
		Q. Fabius Vibulanus.
332.	422.	L. Man. Vulso Capitol. &c.
333.	421.	T. Quintius Capitolinus.
		Numer. Fabius Vibulanus.
334.	420.	T. Q. Pen. Cincin. II. &c.
335.	419.	Agrippa Menenius, &c.
336.	418.	M. Papir. Mugillanus, &c.
337.	417.	P. Lucretius Tricipit. II. &c.
338.	416.	A. Semp. Atratinus II. &c.
339.	415.	P. Cornelius Cossus, &c.
340.	414.	Q. Fab. Vibulanus II. &c.
341.	413.	M. Cornelius Cossus.
		L. Furius Medullinus.
342.	412.	Q. Fabius Ambustus.
		C. Furius Pacilus.
343.	411.	M. Papirius Mugillanus.
		C. Nautius Rutilus.
344.	410.	M. Æmilius Mamercinus.
		C. Valerius Potitus.
345.	409.	Cn. Cornelius Cossus.
		L. Furius Medullinus II.
346.	408.	C. Julius Iulus, &c.
347.	407.	C. Val. Volusinus II. &c.
348.	406.	P. Cor. Rutilus Cossus, &c.
349.	405.	C. Julius Iulus, &c.
350.	404.	P. Cor. Maluginensis, &c.

U. C.	B. C.	
351.	403.	M. Æmil. Mamercin. II. &c.
352.	402.	C. Servilius Ahala III. &c.
353.	401.	L. Valerius Potitus IV. &c.
354.	400.	P. Licinius Calvus, &c.
355.	399.	C. Duilius, &c.
356.	398.	L. Valerius Potitus V. &c.
357.	397.	L. Julius Iulus II. &c.
358.	396.	P. Licinius Calvus, &c.
359.	395.	P. Cornelius Cossus, &c.
360.	394.	M. Furius Camillus III. &c
361.	393.	L. Lucretius Flavus.
		Ser. Sulpicius Camerinus.
362.	392.	L. Valerius Potitus.
		M. Manlius Capitolinus.
363.	391.	L. Lucretius Flavus, &c.
364.	390.	Q. Fabius Ambustus, &c.
365.	389.	M. Furius Camillus, *Dictat.*
		L. Valerius, *Mag. Equit.*
366.	388.	L. Valerius Poplicola II. &c.
367.	387.	T. Quintius Cincinnat. &c.
368.	386.	L. Papirius Cursor, &c.
369.	385.	M. Furius Camillus IV. &c.
370.	384.	A. Manlius Capitolinus, &c.
371.	383.	S. Corn. Malugin. III. &c.
372.	382.	L. Val. Poplicola IV. &c.
373.	381.	Sp. Papirius Crassus, &c.
374.	380.	M. Furius Camillus VI. &c.
375.	379.	L. Valerius Poplic. V. &c.
376.	378.	C. Manlius Capitolinus, &c.
377.	377.	Sp. Furius Medullinus, &c.
378.	376.	L. Æmilius Mamer. V. &c.
379.	375.	L. Sextius Lateranus II.
		C. Licinius Stolo II.
380.	374.	L. Sextius Lateranus III.
		C. Licinius Stolo III.
381.	373.	L. Sextius Lateran. IV.
		C. Licinius Stolo IV.
382.	372.	L. Sext. Lateranus V.
		C. Licinius Stolo V.
383.	371.	L. Furius Medullinus II. &c.
384.	370.	Q. Servilius Priscus III. &c.
385.	369.	L. Quint. Capitolinus, &c.
386.	368.	M. Furius Camillus, *Dictat.*
387.	367.	A. Cornelius Cossus, &c.

Consuls.

388.	366.	L. Æmilius Mamercinus.
		L. Sextius Lateranus.
389.	365.	L. Genucius Aventinus.
		Q. Servilius Ahala.
390.	364.	C. Sulpicius Pæticus.
		C. Licinius Calvus.
391.	363.	L. Æmilius Mamertinus.
		Cn. Genucius Aventinen.
392.	362.	Q. Servilius Ahala II.
		L. Genucius Aventin.
393.	361.	C. Licinius Calvus II.
		C. Sulpicius Pæticus II.
394.	360.	M. Fabius Ambustus.
		C. Pætilius Libo.
395.	359.	M. Pomponius Lænas.
		Cn. Manlius Capitolinus.
396.	358.	C. Fabius Ambustus.
		C. Plautius Proculus.
397.	357.	C. Manlius Rutilus.
		Cn. Manlius Capitolin. II.
398.	356.	M. Fabius Ambustus II.
		M. Popilius Lænas II.
399.	355.	C. Sulpicius Pæticus III.
		M. Valerius Poplicola.
400.	354.	M. Fabius Ambustus III.
		T. Quint. Pennus Capitol.
401.	353.	C. Sulpicius Pæticus IV.
		M. Valerius Poplicola II.
402.	352.	P. Valerius Poplicola.
		C. Martius Rutilus II.
403.	351.	C. Sulpicius Pæticus V.
		T. Quintius Cincinnatus.
404.	350.	M. Popilius Lænas III.
		L. Cornelius Scipio.
405.	349.	L. Furius Camillus Crassus.
		Appius Claudius.
406.	348.	M. Popilius Lænas IV.
		M. Valerius Corvus.
407.	347.	C. Plautius Hypsæus.
		T. Manlius Torquatus.
408.	346.	M. Valerius Corvus II.
		C. Pætilius Libo.
409.	345.	M. Fabius Dorso.
		Ser. Sulpicius Camerin.

CONSULS.

U. C.	B. C.	
410.	344.	C. Martius Rutilus.
		T. Manlius Torquatus II.
411.	343.	M. Valerius Corvus III.
		A. Cornelius Cossus.
412.	342.	C. Martius Rutilus IV.
		Q. Servilius Ahala.
413.	341.	C. Plautius Hypsæus.
		L. Æmilius Mamercinus.
414.	340.	T. Manlius Torquatus.
		P. Decius Mus.
415.	339.	Tib. Æmilius Mamertinus.
		Q. Publilius Philo.
416.	338.	F. Furius Camillus.
		C. Mænius.
417.	337.	C. Sulpicius Longus.
		P. Ælius Pætus.
418.	336.	L. Papirius Crassus.
		Cæso Duilius.
419.	335.	M. Valerius Corvus IV.
		M. Atilius Regulus.
420.	334.	T. Veturius Calvinus.
		Sp. Postumius Albinus.
421.	333.	[L. Papirius Cursor.
		C. Pætilius Libo.]
422.	332.	A. Cornelius Cossus IV.
		Cn. Domitius Calvinus.
423.	331.	M. Claudius Marcellus.
		C. Valerius Flaccus.
424.	330.	L. Papirius Crassus II.
		L. Plautius Venno.
425.	329.	L. Æmilius Mamercus.
		C. Plautius Decianus.
426.	328.	C. Plautius Proculus.
		P. Cornelius Scapula.
427.	327.	L. Cornelius Lentulus.
		Q. Publilius Philo.
428.	326.	C. Pætilius Libo II.
		L. Papirius Mugillanus.
429.	325.	L. Furius Camillus II.
		D. Junius Brutus.
430.	324.	L. Papirius Cursor, *Dictat.*
		L. Pap. Crassus, *Eq. Mag.*
431.	323.	C. Sulpicius Longus II.
		Q. Aulius Cerretanus.
432.	322.	Q. Fabius Maximus.
		L. Fulvius Curvus.

U. C.	B. C.	
433.	321.	T. Veturius Calvinus II.
		Sp. Postumius Albinus
434.	320.	L. Papirius Cursor II.
		Q. Publilius Philo III.
435.	319.	L. Papirius Cursor III.
		Q. Aulius Cerretanus II.
436.	318.	L. Plautius Venno.
		M. Fossius Flaccinator.
437.	317.	Q. Æmilius Barbula.
		C. Junius Bubulcus.
438.	316.	Sp. Nautius Rutilus.
		M. Popilius Lænas.
439.	315.	L. Papirius Cursor IV.
		Q. Publilius Philo IV.
440.	314.	M. Pætilius Libo.
		C. Sulpicius Longus IV.
441.	313.	L. Papirius Cursor V.
		C. Junius Bubulcus II.
442.	312.	M. Valerius Maximus.
		P. Decius Mus.
443.	311.	C. Junius Bubulcus III.
		Q. Æmilius Barbula II.
444.	310.	Q. Fabius Rullianus II.
		C. Martius Rutilus.
445.	309.	L. Pap. Cursor, *Dict.* II.
		Junius Bubulcus, *Eq. Mag.*
446.	308.	P. Decius Mus II.
		Q. Fabius Maximus III.
447.	307.	App. Claudius Cæcus.
		L. Volumnius Flamma.
448.	306.	Q. Martius Tremulus.
		P. Cornelius Arvina.
449.	305.	L. Postumius Megellus.
		Tib. Minucius Augurinus.
450.	304.	P. Sempronius Sophus.
		P. Sulpicius Saverrio.
451.	303.	Ser. Cornelius Lentulus.
		L. Genucius Aventin.
452.	302.	M. Livius Denter.
		M. Æmilius Paulus.
453.	301.	Q. Fabius Maxim. *Dict.* II.
		M. Æmil. Paulus, *Eq. Mag.*
		M. Valer. Corvus, *Dict.* II.
454.	300.	Q. Appuleius Pansa.
		M. Valerius Corvus V.

Consuls.

U. C.	B. C.	
455.	299.	M. Fulvius Pætinus.
		T. Manlius Torquatus.
456.	298.	L. Cornelius Scipio.
		Cn. Fulvius Centumalus.
457.	297.	Q. Fabius Maximus IV.
		P. Decius Mus III.
458.	296.	App. Claudius Cæcus II.
		L. Volumnius Flamma II.
459.	295.	Q. Fabius Maximus V.
		P. Decius Mus IV.
460.	294.	L. Postumius Megellus II.
		M. Attilius Regulus.
461.	293.	L. Papirius Cursor.
		Sp. Carvilius Maximus.
462.	292.	Q. Fabius Gurges.
		D. Junius Brutus Sceva.
463.	291.	L. Postumius Megellus III.
		C. Junius Bubulcus.
464.	290.	P. Cornelius Rufinus.
		M. Curius Dentatus.
465.	289.	M. Valerius Corvinus.
		Q. Cædicius Noctua.
466.	288.	Q. Martius Tremulus II.
		P. Cornelius Arvina II.
467.	287.	M. Claudius Marcellus.
		C. Nautius Rutilus.
468.	286.	M. Valerius Potitus.
		C. Ælius Pætus.
469.	285.	C. Claudius Canina.
		M. Æmilius Lepidus.
470.	284.	C. Servilius Tucca.
		L. Cæcilius Metellus.
471.	283.	P. Cornelius Dolabella.
		Cn. Domitius Calvinus.
472.	282.	C. Fabricius Luscinus.
		Q. Æmilius Papus.
473.	281.	L. Æmilius Barbula.
		Q. Marcius Philippus.
474.	280.	P. Valerius Lævinus.
		Tib. Coruncanius.
475.	279.	P. Sulpitius Saverrio.
		P. Decius Mus.
476.	278.	C. Fabricius Luscinus II.
		Q. Æmilius Papus.
477.	277.	P. Cornelius Rufinus II.
		Cn. Junius Bubulcus II.

U. B.	B. C.	
478.	276.	Q. Fabius Gurges II.
		C. Genucius Clepsina.
479.	275.	M. Curius Dentatus II.
		L. Cornelius Lentulus.
480.	274.	M. Curius Dentatus III.
		Serv. Cornelius Merenda.
481.	273.	C. Fabius Dorso.
		C. Claudius Canina II.
482.	272.	L. Papirius Cursor II.
		Sp. Carvilius Maximus II.
483.	271.	C. Quintius Claudus.
		L. Genucius Clepsina.
484.	270.	C. Genucius Clepsina II.
		Cn. Cornelius Blasio.
485.	269	Q. Ogulnius Gallus.
		C. Fabius Pictor.
486.	268.	P. Sempronius Sophus.
		Ap. Claudius Crassus.
487.	267.	M. Atilius Regulus.
		L. Junius Libo.
488.	266.	M. Fabius Pictor.
		D. Junius Pera.
489.	265.	Q. Fabius Gurges III.
		L. Mamilius Vitulus.
490.	264.	Ap. Claudius Caudex.
		M. Fulvius Flaccus.
491.	263.	M. Valerius Messala.
		M. Otacilius Crassus.
492.	262.	L. Postumius Megellus.
		Q. Mamilius Vitulus.
493.	261.	L. Valerius Flaccus.
		T. Otacilius Crassus.
494.	260	Cn. Cornelius Scipio.
		C. Duilius.
495.	259.	L. Cornelius Scipio.
		C. Aquilius Florus.
496.	258.	A. Atilius Calatinus.
		Q. Sulpicius Paterculus.
497.	257.	C. Atilius Regulus.
		Cn. Cornelius Blasio II.
498.	256.	L. Manlius Vulso.
		Q. Cædicius. }
		M. Atilius Regulus II. }
499.	255.	Ser. Fulvius Nobilior.
		M. Æmilius Paulus.

CONSULS.

U. C. B. C.

500. 254. Cn. Cornelius Scipio II.
A. Atilius Calatinus II.
501. 253. Cn. Servilius Cæpio.
C. Sempronius Blæsus.
502. 252. C. Aurelius Cotta.
P. Servilius Geminus.
503. 251. L. Cæcilius Metellus.
C. Furius Pacilus.
504. 250. C. Atilius Regulus II.
L. Manlius Vulso II.
505. 249. P. Claudius Pulcher.
L. Junius Pullus.
506. 248. C. Aurelius Cotta II.
P. Servilius Geminus II.
507. 247. L. Cæcilius Metellus II.
M. Fabius Buteo.
508. 246. M. Otacilius Crassus II.
M. Fabius Licinus.
509. 245. M. Fabius Buteo.
C. Atilius Bulbus.
510. 244. A. Manlius Torquatus.
C. Sempronius Blæsus II.
511. 243. C. Fundanius Fundulus.
C. Sulpicius Gallus.
512. 242. C. Lutatius Catulus.
A. Postumius Albinus.
513. 241. A. Manlius Torquatus II.
Q. Luctatius Cerco.
514. 240. C. Claudius Centho.
M. Sempronius Tuditanus.
515. 239. C. Mamilius Turinus.
Q. Valerius Falto.
516. 238. Tib. Sempron. Gracchus.
P. Valerius Falto.
517. 237. L. Cornelius L. Caudinus.
Q. Fulvius Flaccus.
518. 236. P. Cornelius L. Caudinus.
C. Licinius Varus.
519. 235. T. Manlius Torquatus.
C. Atilius Bulbus II.
520. 234. L. Postumius Albinus.
Sp. Carvilius Maximus.
521. 233. Q. Fabius Maximus.
M. Pomponius Matho
522. 232. M. Æmilius Lepidus.
M. Publicius Malleolus.

U. C. B. C.

523. 231. M. Pomponius Matho.
C. Papirius Maso.
524. 230. M. Æmilius Barbula.
M. Junius Pera.
525. 229. L. Postumius Albinus II.
Cn. Fulvius Centumalus.
526. 228. Sp. Carvilius Maximus.
Q. Fabius Maximus.
527. 227. P. Valerius Flaccus.
M. Atilius Regulus.
528. 226. M. Valerius Messala.
L. Apustius Fullo.
529. 225. L. Æmilius Papus.
C. Atilius Regulus.
530. 224. T. Manlius Torquatus II.
Q. Fulvius Flaccus II.
531. 223. C. Flaminius Nepos.
P. Furius Philus.
532. 222. Cn. Cornelius Scipio.
M. Claudius Marcellus.
533. 221. P. Cornelius Scipio.
M. Minucius Rufus.
534. 220. L. Veturius Philo.
C. Lutatius Catulus.
535. 219. M. Livius Salinator.
L. Æmilius Paulus.
536. 218. P. Cornelius Scipio.
T. Sempronius Longus.
537. 217. C. Flaminius Nepos II.
Cn. Servilius Geminus.
538. 216. C. Terentius Varro.
L. Æmilius Paulus II.
539. 215. L. Postumus Albinus III.
Q. Fabius Maximus III. }
Tib. Semp. Gracchus. }
540. 214. Q. Fabius Maximus IV.
M. Claudius Marcellus III.
541. 213. Q. Fabius Maximus V.
Tib. Semp. Gracchus II.
542. 212. Q. Fulvius Flaccus III.
Ap. Claudius Pulcher.
543. 211. P. Sulpicius Galba.
Cn. Fulvius Centumalus.
544. 210. M. Valerius Lævinus.
M. Claudius Marcellus IV.

Consuls.

U.C.	B.C.	
545.	209.	Q. Fabius Maximus V.
		Q. Fulvius Flaccus IV.
546.	208.	M. Claudius Marcellus V.
		Tib. Quintius Crispinus.
547.	207.	C. Claudius Nero.
		M. Livius Salinator II.
548.	206.	Q. Cæcilius Metellus.
		L. Veturius Philo.
549.	205.	P. Cornelius Scipio Afr.
		P. Licinius Crassus.
550.	204.	M. Cornelius Cethegus.
		P. Sempronius Tuditanus.
551.	203.	Cn. Servilius Cæpio.
		Cn. Servilius Geminus.
552.	202.	Tib. Claudius Nero.
		M. Servilius Geminus.
553.	201.	Cn. Cornelius Lentulus.
		P. Ælius Pætus.
554.	200.	P. Sulpitius Galba.
		C. Aurelius Cotta.
555.	199.	L. Cornelius Lentulus.
		P. Villius Tappulus.
556.	198.	T. Quintius Flaminius.
		Sex. Ælius Pætus.
557.	197.	C. Cornelius Cethegus.
		Q. Minucius Rufus.
558.	196.	L. Furius Purpureo.
		M. Claudius Marcellus.
559.	195.	M. Porcius Cato.
		L. Valerius Flaccus.
560.	194.	P. Corn. Scipio Afric. II.
		Tib. Sempronius Longus.
561.	193.	C. Cornelius Merula.
		Q. Minucius Thermus.
562.	192.	L. Quintius Flaminius.
		Cn. Domi. Ahenobarbus.
563.	191.	M. Acilius Glabrio.
		P. Cornel. Scipio Nasica.
564.	190.	L. Cornelius Scipio.
		C. Lælius.
565.	189.	Cn. Manlius Vulso.
		M. Fulvius Nobilior.
566.	188.	C. Livius Salinator.
		M. Valerius Messala.
567.	187.	M. Æmilius Lepidus.
		C. Flaminius.
568.	186.	Sp. Postumius Albinus.
		Q. Marcius Philippus.
569.	185.	Ap. Claudius Pulcher.
		M. Sempronius Tuditanus.
570.	184.	P. Claudius Pulcher.
		L. Porcius Licinus.
571.	183.	Q. Fabius Labeo.
		M. Claudius Marcellus.
572.	182.	L. Æmilius Paulus.
		Cn. Bæbius Tamphilus.
573.	181.	P. Cornelius Cethegus.
		M. Bæbius Tamphilus.
574.	180.	A. Postumius Albinus.
		C. Calpurnius Piso.
575.	179.	L. Manlius Acidinus.
		Q. Fulvius Flaccus.
576.	178.	M. Junius Brutus.
		A. Manlius Vulso.
577.	177.	C. Claudius Pulcher.
		Tib. Semp. Gracchus.
578.	176.	Cn. Corn. Scipio Hispalus.
		Q. Petilius Spurinus.
579.	175.	P. Mucius Scævola.
		M. Æmilius Lepidus II.
580.	174.	Sp. Postumius Albinus.
		Q. Mucius Scævola.
581.	173.	L. Postumius Albinus.
		M. Popilius Lænas.
582.	172.	C. Popilius Lænas.
		P. Ælius Ligus.
583.	171.	P. Licinius Crassus.
		C. Cassius Longinus.
584.	170.	A. Hostilius Mancinus.
		A. Atilius Serranus.
585.	169.	Q. Marcius Philippus II.
		Cn. Servilius Cæpio.
586.	168.	L. Æmilius Paulus II.
		C. Licinius Crassus.
587.	167.	Q. Ælius Pætus.
		M. Junius Pennus.
588.	166.	C. Sulpicius Gallus.
		M. Claudius Marcellus.
589.	165.	T. Manlius Torquatus.
		Cn. Octavius.
590.	164.	A. Manlius Torquatus.
		Q. Cassius Longinus.

CONSULS.

U. C.	B. C.	
591.	163.	Tib. Semp. Gracchus II.
		M. Juventius Thalna.
592.	162.	P. Cornel. Scipio Nasica.
		C. Marcius Figulus.
593.	161.	M. Valerius Messala.
		C. Fannius Strabo.
594.	160.	L. Anicius Gallus.
		M. Cornelius Cethegus.
595.	159.	Cn. Cornelius Dolabella.
		M. Fulvius Nobilior.
596.	158.	M. Æmilius Lepidus.
		C. Popilius Lænas II.
597.	157.	Sex. Julius Cæsar.
		L. Aurelius Orestes.
598.	156.	L. Cornelius Lentulus.
		C. Marcius Figulus II.
599.	155.	P. Cor. Scipio Nasica II.
		M. Claudius Marcellus II.
600.	154.	Q. Opimius.
		L. Postumius Albinus.
601.	153.	Q. Fulvius Nobilior.
		T. Annius Luscus.
602.	152.	M. Claud. Marcellus III.
		L. Valerius Flaccus.
603.	151.	L. Licinius Lucullus.
		A. Postumius Albinus.
604.	150.	T. Quintius Flamininus.
		M. Acilius Balbus.
605.	149.	L. Marcius Censorinus.
		M. Manilius.
606.	148.	Sp. Postumius Albinus.
		L. Calpurnius Piso.
607.	147.	P. Corn. Scip. Æmilianus.
		C. Livius Drusus.
608.	146.	Cn. Cornelius Lentulus.
		L. Mummius.
609.	145.	Q. Fabius Æmilianus.
		L. Hostilius Mancinus.
610.	144.	Serv. Sulpicius Galba.
		L. Aurelius Cotta.
611.	143.	Ap. Claudius Pulcher.
		Q. Cæcilius Metellus.
612.	142.	L. Cæcilius Metellus.
		Q. Fabius Maximus.
613.	141.	Cn. Servilius Cæpio.
		Q. Pompeius Nepos.

U. C.	B. C.	
614.	140.	C. Lælius Sapiens.
		Q. Servilius Cæpio.
615.	139.	Cn. Calpurnius Piso.
		M. Popilius Lænas.
616.	138.	P. Cor. Scip. Nas. Serapio.
		D. Junius Brutus.
617.	137.	M. Æmilius Lepidus.
		C. Hostilius Mancinus.
618.	136.	P. Furius Pilus.
		Sex. Atilius Serranus.
619.	135.	Ser. Fulvius Flaccus.
		Q. Calpurnius Piso.
620.	134.	P. Cor. Scip. Nas. Æmil. II.
		C. Fulvius Flaccus.
621.	133.	P. Mucius Scævola.
		L. Calpurnius Piso.
622.	132.	P. Popilius Lænas.
		P. Rupilius.
623.	131.	P. Licinius Crassus.
		L. Valerius Flaccus.
624.	130.	C. Claudius Pulcher.
		M. Perpenna.
625.	129.	C. Sempronius Tuditanus.
		M. Aquilius Nepos.
626.	128.	Cn. Octavius Nepos.
		T. Annius Rufus.
627.	127.	L. Cassius Longinus.
		L. Cornelius Ginna.
628.	126.	M. Æmilius Lepidus.
		L. Aurelius Orestes.
629.	125.	M. Plautius Hypsæus.
		M. Fulvius Flaccus.
630.	124.	C. Cassius Longinus.
		C. Sextius Calvinus.
631.	123.	Q. Cæcilius Metellus.
		T. Quintius Flamininus.
632.	122.	Cn. Domitius Ænobarbus.
		C. Fannius Strabo.
633.	121.	L. Opimius Nepos.
		Q. Fabius Maximus.
634.	120.	P. Manilius Nepos.
		C. Papirius Carbo.
635.	119.	L. Cæcilius Metellus.
		L. Aurelius Cotta.
636.	118.	M. Porcius Cato.
		Q. Martius Rex.

CONSULS.

U.C.	B.C.	
637.	117.	L. Cæcilius Metellus.
		Q. Mucius Scævola.
638.	116.	L. Licinius Geta.
		Q. Fabius Maximus.
639.	115.	M. Æmilius Scaurus.
		M. Cæcilius Metellus.
640.	114.	M. Acilius Balbus.
		C. Porcius Cato.
641.	113.	C. Cæcilius Metellus.
		Cn. Papirius Carbo.
642.	112.	M. Livius Drusus.
		L. Calpurnius Piso.
643.	111.	P. Corn. Scipio Nasica.
		L. Calpurnius Bestia.
644.	110.	M. Minucius Rufus.
		Sp. Postumius Albinus.
645.	109.	Q. Cæcil. Metellus Numid.
		M. Junius Silanus.
646.	108.	Ser. Sulpicius Galba.
		M. Aurelius Scaurus.
647.	107.	L. Cassius Longinus.
		C. Marius.
648.	106.	C. Atilius Serranus.
		Q. Servilius Cæpio.
649.	105.	P. Rutilius Rufus.
		C. Manilius.
650.	104.	C. Marius II.
		C. Flavius Fimbria.
651.	103.	C. Marius III.
		L. Aurelius Orestes.
652.	102.	C. Marius IV.
		L. Lutatius Catulus.
653.	101.	C. Marius V.
		M. Aquilius.
654.	100.	C. Marius VI.
		L. Valerius Flaccus.
655.	99.	M. Antonius Nepos.
		A. Postumius Albinus.
656.	98.	Q. Cæcilius Metellus.
		T. Didius.
657.	97.	Cn. Cornelius Lentulus.
		P. Licinius Crassus.
658.	96.	Cn. Domitius Ænobarbus.
		C. Cassius Longinus.
659.	95.	P. Licinius Crassus.
		Q. Mutius Scævola.

U.C.	B.C.	
660.	94.	C. Cælius Caldus.
		L. Domitius Ænobarbus.
661.	93.	C. Valerius Flaccus.
		M. Herennius.
662.	92.	C. Claudius Pulcher.
		M. Perpenna.
663.	91.	L. Marcius Philippus.
		Sex. Julius Cæsar.
664.	90.	L. Julius Cæsar.
		P. Rutilius Lupus.
665.	89.	Cn. Pompeius Strabo.
		L. Porcius Cato.
666.	88.	L. Cornelius Sylla.
		Q. Pompeius Rufus.
667.	87.	Cn. Octavius.
		L. Cornelius Cinna.
668.	86.	C. Marius VII.
		L. Cornelius Cinna II.
669.	85.	L. Cornelius Cinna III.
		Cn. Papirius Carbo.
670.	84.	Cn. Papirius Carbo II.
		L. Cornelius Cinna IV.
671.	83.	L. Corn. Scipio Asiaticus.
		C. Junius Norbanus.
672.	82.	C. Marius, C. Fil.
		Cn. Papirius Carbo III.
673.	81.	M. Tullius Decula.
		Cn. Cornelius Dolabella.
674.	80.	L. Cornelius Sylla II.
		Q. Cæcilius Metellus.
675.	79.	P. Servilius Vatia Isaur.
		App. Claudius Pulcher.
676.	78.	M. Æmilius Lepidus.
		Q. Lutatius Catulus.
677.	77.	D. Junius Brutus.
		Mam. Æmilius Lepidus.
678.	76.	Cn. Octavius.
		C. Scribonius Curio.
679.	75.	L. Octavius.
		C. Aurelius Cotta.
680.	74.	L. Licinius Lucullus.
		M. Aurelius Cotta.
681.	73.	M. Terent. Varro Lucullus.
		C. Cassius Varus.
682.	72.	L. Gellius Poplicola.
		Cn. Corn. Lent. Clodianus.

CONSULS.

U.C.	B.C.	
683.	71.	Cn. Aufidius Orestes.
		P. Corn. Lentulus Sura.
684.	70.	M. Licinius Crassus.
		Cn. Pompeius Magnus.
685.	69.	Q. Hortensius.
		Q. Cæcilius Met. Creticus.
686.	68.	L. Cæcilius Metellus.
		Q. Martius Rex.
687.	67.	C. Calpurnius Piso.
		M. Acilius Glabrio.
688.	66.	M. Æmilius Lepidus.
		L. Volcatius Tullus.
689.	65.	L. Aurelius Cotta.
		L. Manlius Torquatus.
690.	64.	L. Julius Cæsar.
		C. Marcius Figulus.
691.	63.	M. Tullius Cicero.
		C. Antonius Nepos.
692.	62.	D. Junius Silanus.
		L. Licinius Muræna.
693.	61.	M. Pupius Piso.
		M. Valerius Messala.
694.	60.	L. Afranius.
		Q. Cæcilius Metellus Celer.
695.	59.	C. Julius Cæsar.
		M. Calpurnius Bibulus.
696.	58.	L. Calpurnius Piso.
		A. Gabinus.
697.	57.	P. Corn. Lent. Spinther.
		Q. Cæcilius Metellus.
698.	56.	Cn. Corn. Lent. Marcellin.
		L. Marcius Philippus.
699	55.	Cn. Pompeius Magnus II.
		M. Licinius Crassus II.
700.	54.	L. Domitius Ænobarbus.
		Ap. Claudius Pulcher.
701.	53.	Cn. Domitius Calvinus.
		M. Valerius Messala.
702.	52.	Cn. Pompeius Magnus III.
		sine Collega.
703.	51.	Ser. Sulpicius Rufus.
		M. Claudius Marcellus.
704.	50.	L. Æmilius Paulus.
		C. Claudius Marcellus.
705.	49.	C. Claudius Marcellus.
		L. Cornelius Lentulus.
		C. Julius Cæsar, *Dictator*.

U.C.	B.C.	
706.	48.	C. Julius Cæsar II.
		P. Servilius Vatia Isaur.
707.	47.	C. Julius Cæsar, *Dictat.* II.
		M. Antonius, *Eq. Mag.*
708.	46.	C. Julius Cæsar III.
		M. Æmilius Lepidus.
709.	45.	C. Julius Cæsar IV.
		M. Lepidus, *Eq. Mag.*
710.	44.	C. Julius Cæsar V.
		M. Antonius, *Eq. Mag.*
711.	43.	C. Vibius Pansa.
		A. Hirtius, &c.
712.	42.	L. Munacius Plancus.
		M. Æmilius Lepidus II.
713.	41.	L. Antonius.
		P. Servil. Vatia Isaur. II.
714.	40.	Cn. Domitius Calvinus II.
		C. Asinius Pollio.
715.	39.	L. Marcius Censorinus.
		C. Calvisius Sabinus.
716.	38.	App. Claudius Pulcher
		C. Norbanus Flaccus.
717.	37.	M. Agrippa.
		L. Caninius Gallus.
718.	36.	L. Gellius Poplicola.
		M. Cocceius Nerva.
719.	35.	L. Cornificius Nepos.
		Sex. Pompeius Nepos.
720.	34.	L. Scribonius Libo.
		M. Antonius II.
721.	33.	C. Cæsar Octavianus II.
		L. Volcatius Tullus.
722.	32.	Cn. Domitius Ænobarbus.
		C. Sosius Nepos.
723.	31.	C. Cæsar III.
		M. Messala Corvinus.
724.	30.	C. Cæsar IV.
		M. Licinius Crassus.
725.	29.	C. Cæsar V.
		Sext. Apuleius.
726.	28.	C. Cæsar VI.
		M. Agrippa II.
727.	27.	C. Cæsar Augustus VII.
		M. Agrippa III.
728.	26.	C. Cæsar Augustus VIII.
		T. Statilius Taurus II.

Consuls.

U.C.	B.C.	
729.	25.	C. Cæsar Augustus IX. M. Junius Silanus.
730.	24.	C. Cæsar Augustus X. C. Norbanus Flaccus.
731.	23.	C. Cæsar Augustus XI. Cn. Calpurnius Piso.
732.	22.	M. Claudius Marcellus. L. Arruntius.
733.	21.	Q. Æmilius Lepidus. M. Lollius.
734.	20.	M. Appuleius. P. Silius Nerva.
735.	19.	Q. Sentius Saturninus, Q. Lucretius Vespillo.
736.	18.	P. Cornelius Lentulus. Cn. Cornel. Lentulus.
737.	17.	C. Furnius. C. Junius Silanus.
738.	16.	L. Domitius Ænobarb. P. Cornelius Scipio.
739.	15.	M. Livius Drusus. L. Calpurnius Piso.
740.	14.	M. Licinius Crassus. Cn. Cornel. Lentulus.
741.	13.	Tib. Claudius Nero. P. Quinctilius Varus.
742.	12.	M. Valerius Messala. P. Sulpicius Quirinus.
743.	11.	Q. Ælius Tubero. P. Fabius Maximus.
744.	10.	J. Antonius Africanus. Q. Fabius Maximus.
745.	9.	Claudius Drusus Nero. T. Quinctius Crispinus.
746.	8.	C. Marcius Censorinus. C. Asinius Gallus.
747.	7.	Tib. Claudius Nero II. Cn. Calpurnius Piso.
748.	6.	D. Lælius Balbus. C. Antistius Vetus.
749.	5.	Augustus Cæsar XII. L. Cornelius Sylla.
750.	4.	C. Calvisius Sabinus II. L. Passienus Rufus.
751.	3.	L. Cornelius Lentulus. M. Valerius Messallinus.
752.	2.	Augustus Cæsar XIII. M. Plautius Silvanus.
753.	1.	Cossus Cornelius Lentulus. L. Calpurnius Piso.

U.C.	A.D.	
754.	1.	C. Julius Cæsar Vipsan. L. Æmilius Paulus.
755.	2.	P. Venucius Nepos. P. Alfenius Varus.
756.	3.	L. Ælius Lamia. M. Servilius Geminus.
757.	4.	Sex. Ælius Catus. C. Sentius Saturninus.
758.	5.	Cn. Cornelius Sylla. L. Valerius Messala.
759.	6.	M. Æmilius Lepidus. C. Arruntius Nepos.
760.	7.	A. Licinius Nerva. Q. Cæcilius Metel. Creticus.
761.	8.	M. Furius Camillus. S. Nonius Quinctilianus.
762.	9.	C. Poppæus Sabinus. Q. Sulpicius Camerinus.
763.	10.	P. Cornelius Dolabella. C. Junius Silanus.
764.	11.	M. Æmilius Lepidus. T. Statilius Taurus.
765.	12.	Tib. Germanicus Cæsar. C. Fonteius Capito.
766.	13.	C. Silius Nepos. L. Munacius Plancus.
767.	14.	Sex. Pompeius Nepos. Sex. Apuleius Nepos.
768.	15.	Tib. Drusus Cæsar. C. Norbanus Flaccus.
769.	16.	T. Statil. Sisenna Taurus. L. Scribonius Libo.
770.	17.	C. Cæcilius Rufus. L. Pomponius Flaccus.
771	18.	Cl. Tib. Nero, August. III. Germanicus Cæsar II.
772.	19.	M. Junius Silanus. L. Norbanus Balbus.
773.	20.	M. Valerius Messala. M. Aurelius Cotta.

CONSULS.

U.C.	A.D.	
774.	21.	Cl. Tib. Nero August. IV. Drusus Cæsar, Tib. F. II.
775.	22.	D. Haterius Agrippa. C. Sulpicius Galba.
776.	23.	C. Asinius Pollio. C. Antistius Vetus.
777.	24.	Sex. Cornelius Cethegus. L. Visellius Varro.
778.	25.	M. Asinius Agrippa. Cossus Cornelius Lentulus.
779.	26.	C. Calvisius Sabinus. Cn. Cornelius Lentulus.
780.	27.	M. Licinius Crassus. L. Calpurnius Piso.
781.	28.	Ap. Junius Silanus. P. Silius Nerva.
782.	29.	C. Rubellius Geminus. C. Fusius Geminus.
783.	30.	M. Vinutius Quartinus. C. Cassius Longinus.
784.	31.	Cl. Tib. Nero, August. V. L. Ælius Sejanus.
785.	32.	Cn. Domitius Ænobarbus. A. Vitellius Nepos.
786.	33.	Serg. Sulpicius Galba. L. Cornelius Sylla.
787.	34.	L. Vitellius Nepos. Paullus Fabius Priscus.
788.	35.	C. Sestius Camerinus. M. Servilius Geminus.
789.	36.	Sex. Papirius Gallienus. Q. Plautius Nepos.
790.	37.	Cn. Acerronius Proculus. C. Pontius Nigrinus.
791.	38.	M. Aquilius Julianus. P. Nonius Asprenas.
792.	39.	C. Cæsar Caligula, Aug. II. L. Apronius.
793.	40.	C. Cæsar Caligula, Aug. III. L. Gellius Poplicola.
794.	41.	C. Cæsar Caligula, Aug. IV. Cn. Sentius Saturninus.
795.	42.	Claudius Cæsar, Aug. II. L. Licinius Largus.
796.	43.	Claudius Cæsar, Aug. III. L. Vitellius II.

U.C.	A.D.	
797.	44.	C. Vibius Crispinus. T. Statilius Taurus.
798.	45.	M. Vinutius Quartinus. M. Statilius Corvinus.
799.	46.	P. Valerius Asiaticus. M. Junius Silanus.
800.	47.	Claudius Cæsar, Aug. IV. L. Vitellius II.
801.	48.	A. Vitellius. L. Vipsanius Poplicola.
802.	49.	C. Pompeius Longinus. Q. Verranius Nepos.
803.	50.	C. Antistius Vetus. M. Suillius Rufus.
804.	51.	Claudius Augustus V. S. Corn. Scipio Orphitus.
805.	52.	P. Corn. Sylla Faustus. L. Salvius Otho.
806.	53.	D. Junius Silanus. Q. Aterius Antonius.
807.	54.	M. Asinius Marcellus. M. Acilius Aviola.
808.	55.	Nero Augustus. L. Antistius Vetus.
809.	56.	Q. Volusius Saturninus. P. Cornelius Scipio.
810.	57.	Nero Augustus II. L. Calpurnius Piso.
811.	58.	Nero Augustus III. M. Valerius Messala.
812.	59.	C. Vipsanius Apronianus. C. Fonteius Capito.
813.	60.	Nero Augustus IV. Cossus Corn. Lentulus.
814.	61.	C. Cæsonius Pætus. C. Petron. Turpilianus.
815.	62.	P. Marius Celsus. L. Asinius Gallus.
816.	63.	L. Memmius Regulus. P. Virginius Rufus.
817.	64.	C. Lecanius Bassus. M. Licinius Crassus.
818.	65.	P. Silius Nerva. C. Jul. Atticus Vestinus.
819.	66.	C. Suetonius Paulinus. L. Pontius Tilesinus.

CONSULS.

U.C.	A.D.	
820.	67.	L. Fonteius Capito. C. Julius Rufus.
821.	68.	C. Silius Italicus. M. Celerius Trachalus.
822.	69.	Serv. Sulpicius Galba Imp. T. Vinius Rufinus.
823.	70.	Flav. Vespasianus Imp. II. Titus Vespasianus.
824.	71.	F. Vespasianus Imp. III. M. Cocceius Nerva.
825.	72.	Flav. Vespasianus Imp. IV. Titus Vespasianus II.
826.	73.	Flavius Domitianus. M. Valerius Messalinus.
827.	74.	F. Vespasianus Imp. V. Titus Vespasianus III.
828.	75.	F. Vespasianus Imp. VI. Titus Vespasianus IV.
829.	76.	F. Vespasianus Imp. VII. Titus Vespasianus V.
830.	77.	F. Vespasianus Imp. VIII. Titus Vespasianus VI.
831.	78.	L. Ceionius Commodus. C. Cornelius Priscus.
832.	79.	Flav. Vespasianus Imp. IX. Titus Vespasianus VII.
833.	80.	Titus Vespasianus VIII. Flav. Domitianus VII.
834.	81.	M. Plautius Silvanus. M. Annius Verus Pollio.
835.	82.	F. Domitianus Imp. VIII. T. Flavius Sabinus.
836.	83.	F. Domitianus Imp. IX. T. Virginius Rufus.
837.	84.	F. Domitianus Imp. X Appius Junius Sabinus
838.	85.	F. Domitianus Imp. XI. T. Aurelius Fulvius.
839.	86.	F. Domitianus Imp. XII. S. Cornelius Dolabella.
840.	87.	F. Domitianus Imp. XIII. A. Volusius Saturninus.
841.	88.	F. Domitianus Imp. XIV. L. Minucius Rufus.
842.	89.	T. Aurelius Fulvus II. A. Sempronius Atratinus.
843.	90.	F. Domitianus Imp. XV. M. Cocceius Nerva II.
844.	91.	M. Ulpius Trajanus. M. Acilius Glabrio.
845.	92.	F. Domitianus Imp. XVI. A. Volusius Saturninus II.
846.	93.	Sex. Pompeius Collega. Cornelius Priscus.
847.	94.	L. Nonius Asprenas. M. Arricinius Clemens.
848.	95.	F. Domitianus Imp. XVII. T. Flavius Clemens.
849.	96.	C. Fulvius Valens. C. Antistius Vetus.
850.	97.	Cocceius Nerva Imp. III. T. Virginius Rufus III.
851.	98.	Cocceius Nerva Imp. IV. Ulpius Trajanus II.
852.	99.	C. Sosius Senecio II. A. Cornelius Palma.
853.	100.	Ulpius Trajanus Imp. III. M. Cornelius Fronto III.
854.	101.	Ulpius Trajanus Imp. IV. S. Articuleius Pætus.
855.	102.	C. Sosius Senecio III. L. Licinius Sura II.
856.	103.	Ulp. Trajanus Imp. V. L. Appius Maximus II.
857.	104.	—— Suranus II. P. Neratius Marcellus.
858.	105.	Tib. Julius Candidus II. A. Julius Quadratus.
859.	106.	L. Ceionius Commodus. L. Tutius Cerealis.
860.	107.	C. Sosius Senecio IV. L. Licinius Sura III.
861.	108.	Ap. Annius Trebonius. M. Atilius Bradua.
862.	109.	A. Cornelius Palma II. C. Calvisius Tullus II.
863.	110.	Clodius Crispinus. Solenus Orphitus.
864.	111.	L. Calpurnius Piso. Vettius Rusticus Bolanus.
865.	112.	Ulp. Trajanus Imp. VI. C. Julius Africanus.

Sub *Vespasiano* Imperatore, FASTI CONSULARES, Marmori incisi, in *Capitolio* positi sunt. *Marsham*, p. 502.

THE ERA OF NABONASSAR.

THIS scientific *Chaldean* Era commenced soon after the *Grecian* and the *Roman*. Combined with the *Christian*, they form the four cardinal Eras of Sacred and Profane Chronology.

The origin of this Era is thus represented by *Syncellus*, from the accounts of *Polyhistor* and *Berosus*, the earliest writers extant on Chaldean History and Antiquities.

"*Nabonassar* [King of Babylon] having collected the acts of his predecessors, destroyed them, in order that the computation of the reigns of the *Chaldean* kings might be made from himself *."

It began therefore with the reign of *Nabonassar*, Feb. 26, B.C. 747. The form of year employed therein, is the moveable *year*, of 365 days, consisting of 12 equal months of 30 days, and five supernumerary days; which was the year in common use, as we have seen, among the *Chaldeans*, *Egyptians*, *Armenians*, *Persians*, and the principal Oriental nations, from the earliest times. This year ran through all the seasons, in the course of 1461 years, as observed before.

Though the Historic Era of *Nabonassar* began the 26th of February, this was not the Astronomical commencement of the grand period of 1461 years: that began 120 years before, March 28, B.C. 867; when there was a synchronism of the *New Moon* and *Vernal Equinox* on that day †; which was the beginning of the *Chaldean* year also, and therefore the fittest for the commencement either of the very *first*, or at least a *new* period of their *Annus Magnus*.

The freedom of the Nabonassarean year, from intercalation, rendered it peculiarly convenient for astronomical calculation. Hence it was adopted by the early Greek astronomers, *Timochares* and *Hipparchus*; and by those of the *Alexandrian*

* *Ναβονασαρος συναγαγων τας πραξεις των προ αυτου βασιλεων, ηφανισεν, ὁπως απ' αυτου ἡ καταριθμησις γινηται των Χαλδαιων βασιλεων.* Syncell. Chronograph. p. 207.

† This is demonstrated in a curious periodical publication, by Mr. *Howes*, entitled, *Critical Observations on Books, Ancient and Modern*, Vol. iii. Append. p. 57, 58, *White*, 1788, from a newly constructed *Calippic* Table, and from two Solar Eclipses, Aug. 4, B.C. 868, and July 24, B.C. 867, furnished by M. *Pingrè*, *Hist. Acad. Bell.* N. B. By reckoning the first year before the Vulgar Era, O, he dates these eclipses a year short of the common mode; namely, B.C. 867 and 866.

school, *Ptolomy*, &c. In consequence of this, the whole historical catalogue of reigns has been commonly, though improperly, called *Ptolomy's Canon;* because he probably continued the original table of *Chaldean* and *Persian* kings, and added thereto the *Egyptian* and *Roman*, down to his own time.

The commencement of the Era of *Nabonassar*, B.C. 747, is critically defined, both from History and Astronomy.

1. *Thucydides*, B. 8, has preserved a curious original document, in the third treaty of peace concluded between *Tissaphernes* and the *Peloponnesians*, beginning with its date: "In the 13th year of the reign of *Darius* [II, *Nothus*,] &c." This treaty, it appears from the history, was made in winter, in the 20th year of the Peloponnesian war, which began in the spring, B.C. 431; and, consequently, the 20th year, in winter, was the beginning of the Julian year, B.C. 410: which, added to the 13th year of Darius, or 337th of the Era, gives its commencement, B.C. 747.

2. *Censorinus*, in the valuable synchronisms mentioned before, states, that the 986th *Nabonassarean* year began the 7th of the Calends of July, or June 25, in the year A.D. 238, in which he published his work. Therefore, that *Nabonassarean* year did not end till June 25, of the next Julian year, A.D. 239; which, subtracted from 986, gives the commencement of the Era, B.C. 747.

3. According to *Ptolomy*, *Hipparchus* selected three ancient eclipses of the moon, out of those observed at *Babylon*, and brought from thence; of which the first happened in the first year; and the two others, in the second year of *Mardok Empadus*, the fifth king in succession from *Nabonassar*. This proves decisively, that the *Era of Nabonassar* was in established use before the time of *Hipparchus*, though he did not give the collected years from the beginning of the Era. These, probably, were not reckoned up in the original *Chaldean* Era, which only marked the succession of kings, and the number of years which each reigned. The collected years might have been added afterwards by the *Egyptian* astronomers.

Ptolomy himself mentions a lunar eclipse of 7 digits, in the 7th year of *Ptolomy Philometor*, and 574th year from *Nabonassar*, which happened on the 27th of the Egyptian month *Phamenoth*, and lasted from the 8th, to the 10th hour. In that year, the 27th of *Phamenoth*, was the first of May. And, by astrono-

mical calculation, there was a lunar eclipse of 7 dig. 26 min. on May 1, B.C. 174, which lasted 2 h. 50 min.; and this year, B.C. 174, added to 573 years complete, gives B.C. 747, for the commencement of the Era.

The following Tables of *Nabonassarean* years, reduced to *Julian;* and of the collective days of the twelve months of the *Egyptian*, or *Nabonassarean* year, are of considerable use in calculation.

TABLE XVII.

NABONASSAREAN YEARS, ADJUSTED TO JULIAN YEARS.

N. E.	B. C.	CON.
1	Feb. 26, 747	
4	25, 744	
8	24, 740	
12	23, 736	
16	22, 732	
20	21, 728	
24	20, 724	
28	19, 720	
32	18, 716	
36	17, 712	
40	16, 708	
44	15, 704	
48	14, 700	
52	13, 696	
56	12, 692	
60	11, 688	
64	10, 684	
68	9, 680	
72	8, 676	
76	7, 672	
80	6, 668	
84	5, 664	
88	4, 660	
92	3, 656	
96	2, 652	
100	1, 648	
104	Jan. 31, 644	
108	30, 640	
112	29, 636	
116	28, 632	
120	27, 628	
124	Jan. 26, 624	
128	25, 620	
132	24, 616	
136	23, 612	
140	22, 608	
144	21, 604	
148	20, 600	
152	19, 596	
156	18, 592	
160	17, 588	
164	16, 584	
168	15, 580	
172	14, 576	
176	13, 572	
180	12, 568	
184	11, 564	
188	10, 560	
192	9, 556	
196	8, 552	
200	7, 548	
204	6, 544	
208	5, 540	
212	4, 536	
216	3, 532	
220	2, 528	
224	1, 524	
228	Dec. 31, 521	520
232	30, 517	516
236	29, 513	512

N. E.		B. C.	CON.
240	Dec. 28,	509	508
244	27,	505	504
248	26,	501	500
252	25,	497	496
256	24,	493	492
260	23,	489	488
264	22,	485	484
268	21,	481	480
272	20,	477	476
276	19,	473	472
280	18,	469	468
284	17,	465	464
288	16,	461	460
292	15,	457	456
296	14,	453	452
300	13,	449	448
304	12,	445	444
308	11,	441	440
312	10,	437	436
316	9,	433	432
320	8,	429	428
324	7,	425	424
328	6,	421	420
332	5,	417	416
336	4,	413	412
340	3,	409	408
344	2,	405	404
348	1,	401	400
352	Nov. 30,	397	396
356	29,	393	392
360	28,	389	388
364	27,	385	384
368	26,	381	380
372	25,	377	376
376	24,	373	372
380	23,	369	368
384	22,	365	364
388	21,	361	360
392	20,	357	356
396	19,	353	352
400	18,	349	348
404	17,	345	344
408	16,	341	340
412	15,	337	336
416	14,	333	332
420	13,	329	328
424	12,	325	324
428	11,	321	320
432	Nov. 10,	317	316
436	9,	313	312
440	8,	309	308
444	7,	305	304
448	6,	301	300
452	5,	297	296
456	4,	293	292
460	3,	289	288
464	2,	285	284
468	1,	281	280
472	Oct. 31,	277	276
476	30,	273	272
480	29,	269	268
484	28,	265	264
488	27,	261	260
492	26,	257	256
496	25,	253	252
500	24,	249	248
504	23,	245	244
508	22,	241	240
512	21,	237	236
516	20,	233	232
520	19,	229	228
524	18,	225	224
528	17,	221	220
532	16,	217	216
536	15,	213	212
540	14,	209	208
544	13,	205	204
548	12,	201	200
552	11,	197	196
556	10,	193	192
560	9,	189	188
564	8,	185	184
568	7,	181	180
572	6,	177	176
576	5,	173	172
580	4,	169	168
584	3,	165	164
588	2,	161	160
592	1,	157	156
596	Sept. 30,	153	152
600	29,	149	148
604	28,	145	144
608	27,	141	140
612	26,	137	136
616	25,	133	132
620	24,	129	128

N. E.		B. C.	CON.
624	Sept. 23,	125	124
628	22,	121	120
632	21,	117	116
636	20,	113	112
640	19,	109	108
644	18,	105	104
648	17,	101	100
652	16,	97	96
656	15,	93	92
660	14,	89	88
664	13,	85	84
668	12,	81	80
672	11,	77	76
676	10,	73	72
680	9,	69	68
684	8,	65	64
688	7,	61	60
692	6,	57	56
696	5,	53	52
700	4,	49	48
704	3,	45	44
708	2,	41	40
712	1,	37	36
716	Aug. 31,	33	32
720	30,	29	28
724	29,	25	24
728	28,	21	20
732	27,	17	16
736	26,	13	12
740	25,	9	8
744	24,	5	4
			A. D.
748	Aug. 23,		1
752	22,		4

N. E.		A. D.
756	Aug. 21,	8
760	20,	12
764	19,	16
768	18,	20
772	17,	24
776	16,	28
780	15,	32
784	14,	36
788	13,	40
792	12,	44
796	11,	48
800	10,	52
804	9,	56
808	8,	60
812	7,	64
816	6,	68
820	5,	72
824	4,	76
828	3,	80
832	2,	84
836	1,	88
840	July 31,	92
844	30,	96
848	29,	100
852	28,	104
856	27,	108
860	26,	112
864	25,	116
868	24,	120
872	23,	124
876	22,	128
880	21,	132
884	20,	136
888	19,	140

N. B. It is necessary to observe, that in the first year of *Darius Hystaspes*, two *Chaldean*, or *Nabonassarean* years, began in the same *Julian* year, B.C. 521; namely, the 227th, on the first of *January*, and the 228th, on the 31st of *December* following. Before this time, the *Chaldean* year, which *began* in any *Julian* year, is also the year *conumerary* with it, or the year *for the most part* coinciding therewith. Thus the years N. E. 224, 225, 226, 227, beginning January 1, coincide throughout with the Julian years, B.C. 524, 523, 522, 521, respectively, beginning on the same day; and are, therefore, conumerary therewith, critically; and if we ascend to the first of the Era, N.E. 1, it began February 26, or only 57 days later than the Julian, B.C. 747; which, therefore, was *conumerary* the remainder of the year. Hence every *Chaldean* year before 228, is *conumerary* with the *Julian* year in which it *began;* and, accordingly, is rightly placed in *Petavius'* Tables, Lib. XIII. of the Doctrina Temp. Vol. II. p. 309,

&c. But in consequence of his placing both these *Chaldean* years, 227, 228, in the same *Julian* year, B.C. 521, because they both *began* in it; no ensuing *Chaldean* year, down to the commencement of the *Christian era*, is conumerary with the *Julian* year placed against it, but rather with the following *Julian* year: thus the year N. E. 228, its first day excepted in B.C. 521, is all contained in B.C. 520, with which, therefore, it is, in strictness, conumerary. *Marshall*, on the 70 weeks of *Daniel*, and *Blair*, in his Chronology, more skilfully mark the conumerary years from thence, to the end, in a separate column. The sagacious *Howes* noticed this distinction, in his *Critical Observations*, Vol. I. p. 246, 247; my not sufficiently adverting to which, occasioned, in the former edition, an error in the Table; which, after all, is rather *apparent* than real; since surely the *conumerary* years are entitled to more regard, and correspond better with the history of those times, and with the Greek Chronology.

TABLE XVIII.

NABONASSAREAN DAYS.

Days.	*Thoth.* 1.	*Paophi.* 2.	*Athyr.* 3.	*Chœac.* 4.	*Tybi.* 5.	*Mechir.* 6.	*Phamenoth.* 7.	*Pharmuthi.* 8.	*Pachon.* 9.	*Pauni.* 10.	*Epiphi.* 11.	*Mesori.* 12.
1	1	31	61	91	121	151	181	211	241	271	301	331
2	2	32	62	92	122	152	182	212	242	272	302	332
3	3	33	63	93	123	153	183	213	243	273	303	333
4	4	34	64	94	124	154	184	214	244	274	304	334
5	5	35	65	95	125	155	185	215	245	275	305	335
6	6	36	66	96	126	156	186	216	246	276	306	336
7	7	37	67	97	127	157	187	217	247	277	307	337
8	8	38	68	98	128	158	188	218	248	278	308	338
9	9	39	69	99	129	159	189	219	249	279	309	339
10	10	40	70	100	130	160	190	220	250	280	310	340
11	11	41	71	101	131	161	191	221	251	281	311	341
12	12	42	72	102	132	162	192	222	252	282	312	342
13	13	43	73	103	133	163	193	223	253	283	313	343
14	14	44	74	104	134	164	194	224	254	284	314	344
15	15	45	75	105	135	165	195	225	255	285	315	345
16	16	46	76	106	136	166	196	226	256	286	316	346
17	17	47	77	107	137	167	197	227	257	287	317	347
18	18	48	78	108	138	168	198	228	258	288	318	348
19	19	49	79	109	139	169	199	229	259	289	319	349
20	20	50	80	110	140	170	200	230	260	290	320	350
21	21	51	81	111	141	171	201	231	261	291	321	351
22	22	52	82	112	142	172	202	232	262	292	322	352
23	23	53	83	113	143	173	203	233	263	293	323	353
24	24	54	84	114	144	174	204	234	264	294	324	354
25	25	55	85	115	145	175	205	235	265	295	325	355
26	26	56	86	116	146	176	206	236	266	296	326	356
27	27	57	87	117	147	177	207	237	267	297	327	357
28	28	58	88	118	148	178	208	238	268	298	328	358
29	29	59	89	119	149	179	209	239	269	299	329	359
30	30	60	90	120	150	180	210	240	270	300	330	360
												+ 5
	Thoth.	*Paophi.*	*Athyr.*	*Chœac.*	*Tybi.*	*Mechir.*	*Phamenoth.*	*Pharmuthi.*	*Pachon.*	*Pauni.*	*Epiphi.*	*Mesori.*

Thus in the foregoing instance, Table XVIII. shews that the 27th of Phamenoth is 207 days from the beginning of the year, and Table XVII. shews that the year N. E. 574, began October 6, but Table IV. foregoing, shews that October 6th is the 279th day, wanting 86 days of the end of the year. Deduct these 86 days from 207, and the remainder 121, corresponds to May 1, in the Julian Calendar.

According to *Syncellus*, from the time of *Nabonassar*, the Chaldeans accurately observed the times of the motions of the stars; and *Pliny* relates from *Epigenes*, an author of the first credit, that the Chaldeans had astronomical observations of 720 years engraved upon bricks; which, counted backwards from the second year of *Augustus*, (in his own time probably) would fall on the beginning of the Era of *Nabonassar*, and perfectly accords with the ancient eclipses made use of by *Hipparchus*, of which the earliest was N.E. 27, the first of *Mardok Empad*, according to *Ptolomy*. And *Ptolomy* himself has recorded a great number of eclipses, whose times he has marked by the *Nabonassarean* years in which they happened throughout the whole Canon; which may therefore justly be styled the most scientific in its construction of any within the whole range of ancient chronology.

PTOLOMY'S CANON.

Claudius Ptolomæus, the celebrated Alexandrian mathematician and astronomer, if not the original framer, was at least the continuator of this celebrated Canon down to his own time. He flourished in the reign of the second *Antoninus*.

The first correct edition of it was published by *Calvisius* in his *Opus Chronologicum*, A.D. 1613, from a copy sent to him by Doctor *Overall*, Dean of St. Paul's, and transcribed from the original, accidentally found annexed to a manuscript of *Ptolomy's* Astronomy. And *Petavius*, in his *Rationarium Temporum*, published in 1672, has given at the end of it a second edition of the Canon from a manuscript copy of *Theon's* Commentary on Ptolomy, collated with another ancient manuscript of the same in the French king's library, both of which agree entirely with that of *Calvisius*, except in the spelling of some of the names. And from these the Canon itself, from *Nabonassar* to *Antoninus Pius*, was republished by *Jackson*, *Chronological Antiquities*,

Vol. I. p. 443, &c. From him (with a few corrections) it is given in Table XIX. (which originally contained no more than the reigns, and the collected years) with the current years of the *Nabonassarean* Era, and their accommodation to the Vulgar Christian Era, and the corresponding names of some of the *Chaldean* kings in sacred and profane history.

TABLE XIX. PTOLOMY'S CANON.

CHALDEAN KINGS.

COLL.			Y.	N.E.	B.C.
14.	Nabonassar		14	1	747
16.	Nadius		2	15	733
21.	Chinzirus and Porus		5	17	731
26.	Jugæus		5	22	726
38.	Mardok Empad, or *Merodach Baladan*		12	27	721
43.	Archian		5	39	709
45.	Interregnum I.		2	44	704
48.	Belibus		3	46	702
54.	Apronadius		6	49	699
55.	Regibelus		1	55	693
59.	Mesessemordak		4	56	692
67.	Interregnum II.		8	60	688
80.	Asaradin, or *Esarhaddon*		13	68	680
100.	Saosduchin		20	81	667
122.	Chyniladon		22	101	647
143.	Nabopolassar, or *Labynitus*		21	123	625
186.	Nabokolassar, or *Nebuchadnezzar*		43	144	604
189.	Ilvarodam, or *Evilmerodach*	(2)	3	187	561
194.	Nericassolassar, *Neriglissar*, or *Belshazzar*	(4)	5	190	558
211.	Nabonadius		17	195	553

PERSIAN KINGS.

COLL.			Y.	N.E.	B.C.
218.	Cyrus	(9)	7	212	536
226.	Cambyses		8	219	529
262.	Darius I. son of *Hystaspes*		36	227	521
283.	Xerxes *		21	263	485

* In the Table of PERSIAN KINGS, all the *Julian* years, from *Xerxes* to *Alexander* of Macedon, inclusive, are *conumerary* years, and therefore require to be raised a unit higher each, to give the *Julian* years in which their reigns *began;* as follows:

COLL.		Y.	N.E.	B.C.		B.C.	
283.	Xerxes	21,	263	486,	instead of	485	conumer.
324.	Artaxerxes I.	41,	284	465,		464	
343.	Darius II.	19,	325	424,		423	
389.	Artaxerxes II.	46,	344	405,		404	
410.	Ochus	21,	390	359,		358	
412.	Arogus	2,	411	338,		337	
416.	Darius III.	4,	413	336,		335	
424.	Alexander of Mac.	8,	417	332,		331	

COLL.		Y.	N.E.	B.C.
324.	Artaxerxes I. *Longimanus*	41	284	464
343.	Darius II. *Nothus*	19	325	423
389.	Artaxerxes II. *Mnemon*	46	344	404
410.	Ochus	21	390	358
412.	Arogus, or Arses	2	411	337
416.	Darius III. *Codomannus*	4	413	335

Grecian Kings.

COLL.		Y.	N.E.	B.C.
424.	Alexander of Macedon	8	417	331
431.	Philip Aridæus	7	425	324
443.	Alexander Ægus	12	432	317

Egyptian Kings.

COLL.		Y.	N.E.	B.C.
463.	Ptolemy Lagus	20	444	305
501.	——— Philadelphus	38	464	285
526.	——— Euergetes	25	502	247
543.	——— Philopator	17	527	222
567.	——— Epiphanes	24	544	205
602.	——— Philometor	35	568	181
631.	——— Euergetes II.	29	603	146
667.	——— Soter	36	632	117
696.	Dionysius	29	668	81
718.	Cleopatra	22	697	52

Roman Emperors.

COLL.		Y.	N.E.	B.C.
761.	Augustus	43	719	30
				A.D.
783.	Tiberius	22	762	14
787.	Caius Caligula	4	784	36
801.	Claudius	14	788	40
815.	Nero	14	802	54

COLL.		Y.	N.E.	A.D.
825.	Vespasian	10	816	68
828.	Titus	3	826	78
843.	Domitian	15	829	81
844.	Nerva	1	844	96
863.	Trajan	19	845	97
884.	Adrian	21	864	116
907.	Antoninus Pius	23	885	137

TABLE XX. A CONTINUATION OF THE CANON.

Roman Emperors.

	Y.	A.D.
Marcus Aurelius, or Antoninus Philosophus	19	161
Commodus	13	180
Pertinax	1	193
Septimius Severus	17	194
Caracalla	6	211
Opilius Macrinus	1	217
Heliogabalus	4	218
Alexander Severus	13	222
Two Gordians	3	235
Gordian, jun.	5	238
Philip the Arabian	6	243
Decius	2	249
Gallus Hostilius	2	251
Valerian and Gallienus	15	253
Claudius	2	268
Aurelian	5	270
Tacitus and Florian	1	275

	Y.	A.D.
Probus	6	276
Carus	2	282
Diocletian	20	284
Constantius Chlorus	2	304
Constantine the Great	31	306
Constantine II.	4	337
Constantius alone	20	341
Julian the Apostate	2	361
Jovian	1	363
Partition of the Empire	0	364

Eastern Emperors.

	Y.	A.D.
Valens	15	364
Theodosius the Great	16	379
Arcadius	13	395
Theodosius II.	42	408
Marcianus	7	450
Leo I.	17	457
Leo II.	2	474
End of the Western Empire.		476
Anastasius	27	491
Justin I.	9	518
Justinian	38	527
Justin II.	13	565
Tiberius II.	4	578
Mauricius	20	582
Phocas	8	602
Heraclius	31	610
Constans II.	27	641
Constantine III.	17	668
Justinian II.	9	685
Leontius	3	694
Apsimar, or Tiberius	7	697
Justinian II. again	7	704
Philippicus Bardanes	2	711
Anastasius II.	2	713
Theodosius III.	2	715
Leo III.	24	717
Constantine IV.	34	741
Leo IV.	5	775
Constantine V.	17	780
Irene	5	797
Nicephorus	9	802
Michael	2	811
Leo V.	8	813
Michael II.	8	821
Theophilus	13	829
Michael III.	25	842
Basilius	19	867
Leo VI.	24	886
Alexander I.	1	910
Constantine VI.	49	911
Romanus	3	960
Nicephorus II.	6	963
John Zemisces	7	969
Basilius II.	50	976
Constantine VII.	2	1026
Romanus II.	6	1028
Michael IV.	7	1034
Michael V.	1	1041
Constantine VIII.	12	1042
Theodora	3	1054
Isaac Comnenus	2	1057
Constantine IX.	9	1059
Romanus III.	3	1068
Michael VI.	7	1071
Alexius Comnenus	37	1078
Nicephorus III.	3	1115
John Comnenus	25	1118
Manuel Comnenus	37	1143
Alexius Comnenus II.	3	1180
Andronicus	2	1183
Isaac Angelus	9	1185
Alexius III.	10	1194

Emperors of Nice.

	Y.	A.D.
Theodore Lascaris	18	1204
John Ducas	33	1222
Theodore II.	3	1255
John Lascaris	1	1258
Michael Paleologus	24	1259
Andronicus II.	37	1283
Andronicus III.	21	1320
John Paleologus	50	1341
Manuel Paleologus	33	1391
John Paleologus II.	24	1424
Constantine Paleologus	5	1448
End of the Eastern Empire		1453

KINGS OF ENGLAND.

	YEARS.	A. D.		YEARS.	A. D.
Henry VI.......... last	8	1453	Charles I...............	23	1625
Edward IV. and V.......	22	1461	Charles II.	36	1648
Richard III.............	2	1483	James II................	4	1684
Henry VII...............	24	1485	William III.............	13	1688
Henry VIII.	38	1509	Anne....................	13	1701
Edward VI...............	6	1547	George I................	13	1714
Mary	5	1553	George II.	33	1727
Elizabeth	44	1558	George III.............		1760
James I.................	23	1602			

To the authenticity of these copies of *Ptolomy's* Canon, the strongest testimony is given by their exact agreement throughout, with above 20 dates and computations of eclipses in *Ptolomy's Almagest*, recited by *Jackson*, as he himself acknowledges. Vol. I. p. 450.

From its great use as an astronomical era, confirmed by unerring characters of eclipses, this Canon justly obtained the highest authority among historians also. It has most deservedly been esteemed an invaluable treasure, *omni auro pretiosior*, as *Calvisius* says, and of the greatest use in Chronology, without which, as *Marsham* observes, there could scarcely be any transition from sacred to profane history; and by means of it, some important dates are supplied in sacred Chronology, that could not otherwise be ascertained. It fills up especially an important chasm, from the reign of *Nebuchadnezzar* to the reign of *Cyrus*, without which the term of the 70 years of the *Babylonish* captivity, ending with the latter, could not easily be adjusted.

It must, however, be acknowledged, that accurate as these authentic copies of the Canon unquestionably are every where else, in this single period a small correction is necessary, to accommodate it to Scripture; for, according to the Canon, from the first of *Nabokolassar*, or *Nebuchadnezzar*, B.C. 604, to the first of *Cyrus*, B.C. 538, is an interval of only 66 years; and therefore, if the Captivity began in the end of the third, or commencement of the fourth year of *Jehoiakim*, B.C. 605, Dan. i. 1; 2 Kings xxiv. 1; Jer. xxv. 1; from thence, to the accession of *Cyrus*, was only 67 years complete, or 68 current.

To remedy this, *Syncellus*, the oldest Christian author who has noticed it, in his valuable *Chronographia*, composed about the year A.D. 780, has given two copies of the Canon; the one

he calls a Mathematical and Astronomical copy, pretending that it is the same as that of *Ptolomy*, which it certainly is not; the other, an Ecclesiastical copy, partly taken, as he says, from *Josephus**, and partly from *Africanus*, and other Christian historians, p. 207 and 147, note. Both these copies agree in having two interpolated years in the reigns of *Ilvarodam* and *Nericassolassar*, making together eight years instead of six; with this difference, that the one copy gives to the former three years, and to the latter five; while the other gives to the former five, to the latter three years, reversing the numbers.

About A.D. 960, an anonymous Greek Canon, inserted in *Scaliger's Emendatio Temporum*, p. 743, adopted this interpolation of two years, assigning three years to Ουαλαμαροδαχ, *Evilmerodach*, and five years to Βαλτασαρ, *Belshazzar;* and the succeeding chronologers, *Scaliger*, *Petavius*, *Usher*, *Prideaux*, *Jackson*, &c. have adopted this interpolation as indispensably necessary to reconcile the Canon to Holy Writ, which is effectually done thereby; for from the commencement of the Captivity, B.C. 605, to the corrected first of *Cyrus*, B.C. 536, is 69 years complete, or 70 years current, which corresponds to the account of *Josephus:* "In the first year of the reign of *Cyrus*, which was the *seventieth* (το ἑβδομηκοστον) from the day of the removal of our people from their native land to *Babylon*, &c." Ant. 11, 1, 1. And it seems from *Ezra's* account, that the return of the children of Israel from captivity was completed in the *seventh* month of the first year of *Cyrus*, (Ezra iii. 1.) who, though styled "king of *Persia*," in the decree for their return, yet "it was after THE LORD GOD OF HEAVEN had given him *all the kingdoms of the earth*," or after his conquest of *Babylon*. Ezra i. 1, 2. And it is afterwards expressly stated to be "the first year of *Cyrus*, king of *Babylon*." Ezra v. 13.

How then are we to account for this anticipation of two years in the original Canon, dating the accession of *Cyrus*, B.C. 538?

This may satisfactorily be explained from the usage of the Canon in a parallel case. It is remarkable, that the accession of *Alexander* the Great to the Persian throne is dated from his decisive victory at *Arbela*, Oct. 1, B.C. 331, not from the death of *Darius*, his rival, the year after, about Midsummer, B.C. 330.

* But *Josephus*, Contr. *Apion*. lib. i. in his copy of the Canon, assigns only two years to *Evilmerodach*, and four to *Neriglissar*.

And *Plutarch*, in his life of *Alexander*, says, that "the Greeks themselves considered the *Persian* empire as subverted from that moment; and accordingly, after the battle, saluted *Alexander* king of *Asia*, who sacrificed magnificently to the gods on the occasion."

In like manner the Canon dates the accession of *Cyrus*, not from the capture of *Babylon* itself, B.C. 536, but from his decisive victory over the rebellious king of *Babylon*, who is called *Nabonadius*, about two years before, B.C. 538, when he defeated him in a pitched battle, and drove the *Babylonians* into the city, which he afterwards besieged, and, at length, took by a stratagem, noticed both by *Herodotus* and *Xenophon*, of turning the waters of the *Euphrates* into a lake, or canal, above the town, and sending parties of troops to enter the channel of the river, above and below the town, as soon as it became fordable; by which means the city was taken "*at each end*" by surprise, Jer. li. 31, during the drunken festival of the *Sakea*, Jer. li. 41.

And, indeed, that the siege of *Babylon* could not have lasted much less than two years, may fairly be collected from the accounts of *Herodotus* and *Xenophon*. The former says, that "the *Babylonians* having laid up provisions for many years, were under no apprehensions about the siege: on the other hand, *Cyrus*, finding *much time consumed*, and his affairs not at all advanced, was at a great loss what he should do next; when, *at last*, either by some other person's suggestion, or by his own sagacious invention, he resolved upon the following stratagem," &c. B. 1, §. 190, 191*.

Xenophon also sufficiently intimates, that *Cyrus* did not expect to take the city in *less than a year:* for *Cyrus*, he says, divided his army into twelve parts, that each division might be employed a month, in turn, at the siege, whilst the rest were engaged "in a work of so great *labour* and *time*, as digging the canal," &c. where "the depth of the *Euphrates* was sometimes greater than the height of two men standing on each other." Cyrop. B. 7.

That *Cyrus* did not survive the capture of *Babylon* above seven years, may also be collected from *Xenophon*. This histo-

* Victo *Nabonido*, non *statim* fuisse potitum Babylone, testis *Herodotus*—sed *multum post temporis*:—tunc vere completi sunt 70 anni captivitatis. *Scaliger. Notæ Ad Fragm.* p. 16.

rian, the basis of whose *Cyropædia* is true, though the work be embellished with some fictitious ornaments, and who served in *Asia* under *Cyrus* the younger, and therefore had an opportunity of learning many particulars of the life of *Cyrus* the Great, unknown to the Greeks, relates, that " *Cyrus* usually spent seven months in the year at *Babylon*, during the winter season, because the climate was warm; three months at *Susa* in spring; and two months at *Ecbatana* during the heat of summer; that he might enjoy an equal temperature throughout his extensive dominions." Lib. viii. p. 498. Hutchinson. Shortly after, he observes, that " *Cyrus*, in process of time, being now very elderly, comes from [these his usual places of residence] to the *Persians*, *the seventh* [year] in the course of his sovereignty *," and shortly after dies. Lib. viii. p. 499.

And that *Cyrus* actually died, and was succeeded by his son *Cambyses*, B. C. 529, according to the Canon, is demonstrated by a lunar eclipse, recorded by *Ptolomy* as happening in the seventh year of *Cambyses*, N.E. 225. or B.C. 523; for B.C. 523 + 6=B.C. 529.

We are therefore abundantly warranted to deduct two years from the nine assigned by the Canon to the reign of *Cyrus*, reckoning from his decisive victory over the *Babylonians*, in order to reduce the commencement of his sovereignty to the actual capture of *Babylon*, two years after: this deduction exactly compensating the addition of two years to the reigns of *Evilmerodach* and *Belshazzar*, and thus preserving the subsequent integrity of the *Canon;* while, in the important period of the Captivity, it is thus easily and naturally reconciled to Holy Writ and Sacred Chronology. For though the *Chaldeans* might date the sovereignty of *Cyrus* from that decisive victory, which put an end to the independence of the *Babylonians*, yet the sacred historians would naturally date that sovereignty from the capture of *Babylon*, the era of their own deliverance from the Babylonish captivity.

And this is the only correction necessary to be admitted. Those of *Petavius*, *Usher*, *Prideaux*, *Jackson*, &c. altering the

* The original is, Οὑτω δη του αιωνος προκεχωρηκοτος, μαλα δη πρεσβευτης ων ὁ Κυρος αφικνειται εις Περσας, το ἑβδομον επι της αυτου αρχης. Here *Hutchinson*, in his note (a) contends, that το ἑβδομον should be taken adverbially for " *the seventh time*," like the Latin *septimum*. But the *seventh time* is equivalent to the *seventh year*, ince he went thither only *once a year*.

dates and lengths of the ensuing reigns after *Cyrus*, under the specious name of *corrections*, are in reality *corruptions*, founded in ignorance of the principles on which it was originally constructed; as *Marsham* truly observes: "Chronographi Christiani futilibus conjecturis nimium indulgentes, miris modis Canonem hunc *castigarunt*, vel potius *conturbarunt*." Chron. p. 506.

1. Thus, *Jackson*, by continuing downwards the two interpolated years of *Evilmerodach* and *Belshazzar*, dates the reigns of *Cambyses*, B.C. 527; *Darius* I. B.C. 519; *Xerxes*, B.C. 483; *Artaxerxes* I. B.C. 462; *Darius* II. B.C. 421; and *Artaxerxes* II. B.C. 402; each two years lower than the *Canon*, in defiance of several eclipses recorded by *Ptolomy* as observed at *Babylon;* viz. in the seventh year of *Cambyses;* in the 20th and 31st of *Darius* I.; and in the 23d of *Artaxerxes* II.; ascertaining the true dates of the commencement of their reigns, in conformity with the Canon. *Jackson*, Vol. I. pp. 453, 454.

2. By an unwarrantable defalcation, he drops three years of the reign of *Artaxerxes* II. reducing it to 43 years, against the genuine copies of the Canon, and those of *Syncellus* also; and by this means, dates the succeeding reigns of the *Persian* kings a year higher than the Canon; namely, *Ochus*, B.C. 359; *Arses*, B.C. 338; *Darius* III. B.C. 336; and *Alexander* the Great, B.C. 332, antedating the accession of *Alexander* a year before the decisive victory of *Arbela*, in the year B.C. 331, as demonstrated by the lunar eclipse recorded by *Plutarch*, eleven days before the battle. *Jackson*, vol. I. p. 455.

3. A leading cause of these corruptions of the Canon by *Jackson*, may perhaps be traced to a fanciful and unfounded hypothesis which he adopted, respecting the time of the famous prophecy of the 70 weeks in *Daniel;* for, assuming that they began in the 20th year of *Ahasuerus*, Neh. ii. 1. and mistaking this prince for *Xerxes*, with *Josephus*, who in reality was *Artaxerxes Longimanus;* from his supposed date of the 20th of *Xerxes*, there were 463 years to the Christian era, and from thence 27 more to our Lord's baptism and preaching, A.D. 28, amounting to 490 years exactly; but the canonical date of the 20th of *Xerxes* being two years higher, would make the amount 492 years, overturning the hypothesis. *Jackson*, Vol. I. p. 454. Not. (27.)

II. The principles upon which this truly scientific Canon was constructed are next to be explained.

RULE 1. *The reigns consist of full or complete years*, which

are reduced to *Julian* years, Table XVII. in order to preserve the continuity of time in reckoning.

RULE 2. *Each king's reign begins at the Thoth, or New year's day before his accession, and all the odd months of his last year are included in the first year of his successor.*

Thus, the actual accession of Alexander the Great was at the decisive victory of *Arbela*, Oct. 1, B.C. 331, but his reign in the Canon began the preceding new year's day of the same current *Nabonassarean* year, Nov. 14, B.C. 332, which ended soon after the battle, Nov. 14, B.C. 331.

The death of Alexander the Great was in the 114th Olympiad, according to *Josephus*, May 22, B.C. 323 *; but the era of his successor, *Philip Aridæus*, began in the Canon the preceding new year's day, Nov. 12, B.C. 324, as confirmed by *Censorinus*, who reckons from thence 294 years to the accession of *Augustus*, B.C. 30. But B.C. 324 — 294 = B.C. 30.

Tiberius died March 16, A.D. 37, but the reign of his successor, *Caius Caligula*, began in the Canon from the preceding new year's day, Aug. 14, A.D. 36.

From these two rules, it follows, that *the last year of any reign belongs thereto wholly, or exclusively*, and that *the beginning of a reign is sometimes dated in the Canon near a full year before the actual accession*, and *frequently one nominal Julian year before*. Whence *Petavius* complained that *Ptolomy* often makes the Roman emperors after *Caligula* begin their reign a year too soon. *Rationar. Temp.* Pars II. lib. iv. c. 6. This peculiar construction of the Canon was first fortunately discovered by the learned *Dodwell*, in the Appendix to his *Dissertationes Cyprianicæ*, and was afterwards confirmed by *Vignoles* in his Chronology. " In this Canon," says he, " the first year of each king commences with the year which is *current* at his accession, although a considerable part of it should have been already past. We have just as many proofs of it as there are kings, with the time of whose death we are made acquainted ;" and he has proved it in several cases of *Persian* kings in the Canon: but they are too intricate to be adduced. *Chronol. Sacré*, Berlin, 1738, ch. ii. sect. 4.

* *Josephus* contr. Apion. lib. i. § 22, says, " All historians acknowledge that *Alexander* died in the 114th *Olympiad* :" which began about the Summer solstice, B C. 324; consequently, the 22d of May, or beginning of June, when he died, fell in the ensuing *Julian* year, B.C. 323.

Although the Canon assigns eight full years to the reign of *Alexander* the Great, which are included in the sum of collected years from *Nabonassar*, 424; yet it apparently contains only seven *Julian* years, namely, from B.C. 331, to B.C. 324. In order, therefore, to compleat the seeming deficiency, *Jackson* unskilfully interpolated one year in his reign, making it begin a year earlier, B.C. 332. While to compensate for this year, and the two other interpolated years of *Evilmerodach* and *Belshazzar*, he omitted three years of the longest reign, of *Artaxerxes* II.; following *Diodorus*, as he says. By this compensation of errors, his ensuing Canon of *Egyptian* kings' reigns is correct; and so is that of the *Roman* emperors till *Caligula*, in whose reign he interpolates a year, and renders the remainder of the Canon incorrect to the end.

RULE 3. *The names of kings who reigned less than a year are omitted in the Canon;* namely,

Laborosoarchod - - -	9	months	before *Nabonadius*.
Smerdis Magus - - -	7	———	——— *Cambyses*.
Maraphis - - - - -	3	——— }	——— *Darius* I.
Artaphrenes - - - -	3	——— }	
Artabanus - - - - -	7	———	——— *Artaxerxes* I.
Xerxes II. 1½ } *Sogdianus* 6½ } - -	8	——— {	——— *Darius* II.
Galba - - - - - -	7	——— }	
Otho - - - - - -	3	——— }	——— *Vespasian*.
Vitellius - - - - -	3	——— }	

RULE 4. *But the short reigns of such kings are not suppressed; they are tacitly included either in the first year of the successor, if there be but one reign, or else distributed between the last year of the predecessor, and the first of the successor, if there be more, exceeding a year all together.*

Thus, the nine months of *Laborosoarchod* are included in the first year of *Nabonadius*. The same will hold of the seven months of *Artabanus*, and the eight of *Xerxes* II. and *Sogdianus*. But the seven months of *Smerdis Magus*, according to *Herodotus*, were included in the reign of *Cambyses*, which was actually no more than seven years and five months, and thereby made eight years in the Canon. While the reigns of the two conspirators, *Maraphis* and *Artaphrenes*, who, according to *Æschylus*, succeeded *Smerdis Magus*, and which might have amounted to about half a year more, were included in the first year of their associate, *Darius* I. who succeeded them.

In like manner the reigns of *Galba*, *Otho*, and *Vitellius*, were distributed between their predecessor *Nero* and their successor *Vespasian;* but the greater portion of the amount of their reigns, 13 months, fell to the latter: for *Nero* died June 9, A.D. 68, and the Thoth, or New year's day that year, fell on August 6th, near two months after, which therefore were included in his reign, ending the New year's day *after* his death. *Vespasian's* accession was on July 1, in the ensuing year, A.D. 69; but his reign began, according to the second rule, on the *foregoing* New year's day, August 6, A.D. 68. Consequently, his first year included the 11 remaining months of the omitted emperors.

The inquisitive reader may find this very intricate subject copiously discussed in the learned and ingenious publication before referred to, *Howe's Critical Observations on Books*, Vol. I.

Table XX. contains a useful continuation of *Ptolomy's* Canon, down to the accession of his present Majesty, GEORGE III. taken from *Kennedy's* Astronomical *Canon*, with some corrections. Chronol. p. 148.

ERA OF SELEUCIDÆ, OR ALEXANDER'S SUCCESSORS.

This Era was so called from *Seleucus*, the successor of *Alexander* the Great, in the kingdom of *Syria*. It was more usually called the *Era from Alexander*, under which title it is still used by the Syrian Christians; and by the Arabs it was styled *Dilcarnaim* "of the two horned," meaning *Alexander*, who wished to be considered as the son of Jupiter *Ammon*, whose emblem was a Ram, and was so described in *Daniel's* prophecies. In the first book of *Maccabees*, i. 10, it was called the Era of "*the kingdom of the Greeks*," or of *Alexander's* successors. By the Jews, the *Era of Contracts*, because they were obliged to regulate their civil concerns thereby. *Josephus* is perhaps the only ancient writer who has joined to it the name of *Seleucus*, Ant. 12, 5, 3, whose power was by no means established when it commenced, nor for some time after, till the decisive battle of *Ipsus*, B.C. 301.

This era properly began from the death of *Alexander Ægus*, the son of *Alexander* the Great, who was murdered in the fifth year of his reign, B.C. 312, or the 12th year of the era of *Philip*, and therefore it properly began at the extinction of *Alexander*

the Great's posterity, or the end of their dominion. And as the era of *Philip* was continued in the series of *Egyptian* kings, beginning with *Ptolomy Lagus* *, down to the Roman emperors, so this era likewise branched off from thence; and from its prevailing in *Syria* chiefly, the most powerful of the kingdoms erected by *Alexander's* successors thence assumed the name of *Seleucus.* Thus *Albategni*, the great Arabian astronomer and mathematician, in his work *De Scientia Stellarum*, c. 30, relates, that "he observed an eclipse of the sun in the year of *Dilkarnaim*, 1202, which is the 1214th year from *Alexander's* death, in the month *Ab*." Evidently considering it as the continuation of the Era of *Philip*, which began at *Alexander's* death, (or rather the end of his reign in the Canon) and not at the accession of *Seleucus*, as *Prideaux* and others have imagined. This year of the eclipse was 1202—B.C. 312=A.D. 890 complete, or 891 current; and the *Syrian* month *Ab* corresponded to *August* in the *Julian* Calendar, and accordingly, the astronomical tables intimate a solar eclipse, A.D. 891, August 8.

This example shews, that the fixed *Syro-Macedonian* year, which began at the calends of October, was used in computing by this era, as well as the moveable *Chaldean* or *Egyptian* by *Ptolomy*. And from the difference of half a year, between the end of *Alexander*'s reign in the Canon, November 12, B.C. 324, and his death, May 22, in the ensuing year, B.C. 323, may we satisfactorily account for a variation in the date of this era, B.C. 312, or B.C. 311; the *Syrians* reckoning the twelve preceding years from the former epoch, the *Greeks* from the latter. Some *Greek* cities in Asia, also, began it in Spring, others in Autumn, and in different months of those seasons, as well as different days of those months. All these diversities indicate, that when they substituted *Syrian* or *Macedonian* months, and an intercalated fixed year, instead of the moveable retrograde year of the *Chaldean* and *Philippine* era, current in Asia, they departed irregularly from the old rule of the commencement of the civil year, without agreeing on any new general rule to supply its place, which has been of infinite detriment to Ancient Chronology.

Hence we may reconcile some apparent dissonances in the two books of the *Maccabees*:

* Although *Alexander Ægus* was murdered about the fifth year of his reign, it is continued to the twelfth year in the Canon, comprehending the anarchy that ensued till the establishment of *Ptolomy Lagus* on the throne of Egypt.

1 Mac. vi. 16. The death of *Antiochus Epiphanes* is dated "in the 149th year" of the kingdom of the Greeks; but 2 Mac. xi. 22—33, a letter of *Antiochus Eupator*, his son, who succeeded him, "*after his father was translated to the gods*," is dated a year earlier, "in the 148th year, and on the 15th day of the month *Xanthicus*."

Again: 1 Mac. vi. 20.—"in the 150th year," *Judas* besieged the garrison in "the tower," or citadel, who fled for refuge to *Eupator*, when the latter invaded *Judea*, but afterwards made peace with the Jews; but 2 Mac. xiii. 1. refers these transactions to "the 149th year."

Lastly, 1 Mac. vii. 1. represents *Demetrius Soter*, the son of *Seleucus Philopator*, as departing from *Rome*, where he had been a hostage, invading and putting *Antiochus Eupator* and *Lysias* to death, "in the 151st year;" but 2 Mac. xiv. 1, 2. refers this transaction to the 150th year. Compare 2 Mac. xiii. 1. and 2 Mac. xiv. 4.

The author of the first book of the *Maccabees* dated the commencement of the year from the first month, *Nisan*, or *Xanthicus*, in Spring; the author of the second, who was a different person, and of inferior estimation, dated it half a year later, from the seventh month, *Tisri*, or Autumn. Hence the letter of *Antiochus Eupator* to the Jews, dated the 15th of *Xanthicus*, was in the 148th year complete, or 149 current, according to the former, but only in the 148th current, according to the latter; and this solution satisfactorily reconciles the apparent dissonances between both.

The following Table of the reigns of *Seleucus* and his successors, until the voluntary annexation of the kingdom to *Armenia* by the Syrians, will be found equally useful in the study of Sacred and Profane History, during that turbulent and intricate period. It is chiefly collected from Dr. *Gillies*' *History of the World*, from *Alexander* to *Augustus*, 1807.

TABLE XXI. KINGS OF SYRIA.

	Y.	S.E.	B.C.
Seleucus Nicator	32	1	312
Antiochus Soter	19	33	280
Antiochus II. Theos	15	52	261
Seleucus II. Callinicus	21	67	246
Seleucus III. Keraunus	2	88	225
Antiochus III. Magnus	36	90	223

	Y.	S.E.	B.C.
Seleucus IV. Philopator	12	126	187
Antiochus IV. Epiphanes	11	138	175
Antiochus V. Eupator	2	149	164
Demetrius Soter	11	151	162
Alexander Balas	5	162	151
Demetrius II. Nicator	2	167	146
Antiochus VI. Epiphanes	1	169	144
Diodotus, or Tryphon	5	170	143
Antiochus VII. Sidetes	8	175	138
Demetrius II. again	4	183	130
Alexander II. Zebina	4	187	126
Antiochus VIII. Grypus	25	191	122
Seleucus VI. Nicator	5	216	97
Philip	8	221	92
Tigranes, king of *Armenia*		229	84

Kings of Damascus.

Antiochus IX. Cyzicenus	18	196	113
Antiochus X. Eusebes	3	218	95
Demetrius III. Eukærus	4	229	92
Antiochus XII.	4	225	88
Tigranes, king of *Armenia*		229	84

Era of the Hejira, *or* flight of Mahomet.

This celebrated Era of *Mahomet's* flight from *Mecca* to *Medina*, commenced July 16, A.D. 622, the second day of the new Moon, when she became visible. See *Abulfeda's* Life of *Mahomet*, p. 53.

The use of the *Lunar* year was appointed by *Mahomet*, rejecting intercalations. He alludes thereto in the *Koran*. Sur. x. verse 5. "God has given light to the Sun, and brightness to the Moon: He has regulated her phases; they serve mankind to divide the time, [by weeks, and months] and to count the years *."

A complete Lunation, or *Synodical* month, consisting of 29½ days, the *Arabs* composed their months of 29 and 30 days alternately, thus:

	D.	COLL.		D.	COLL.
1. *Muharram*	30	30	3. *Rabia* I.	30	89
2. *Saphar*	29	59	4. *Rabia* II.	29	118

* See *Savary's* French Translation of the *Koran;* which is much more faithful and elegant than *Sale's* English Translation.

	D.	COLL.		D.	COLL.
5. *Jomada* I.	30	148	9. *Ramadan*	30	266
6. *Jomada* II.	29	177	10. *Shawal*	29	295
7. *Rajam*	30	207	11. *Dulkaadah*	30	325
8. *Shaaban*	29	236	12. *Dulheggia*	29	354

This *Lunar* year of 354 days, falling short eleven days of the common Julian, or Calendar year of 365 days, is moveable, or runs through all the seasons in $\frac{365}{11} = 33\frac{2}{11}$ years. So that a cycle of 33 Lunar years gains an entire year upon the Calendar; containing only 32 Julian years. And three cycles gaining three years, we may reckon a hundred Lunar years equal to 97 Solar.

Beveridge in his Chronology, Lib. 1. Cap. 17., has given accurate rules for reducing the *years, months, days,* and *feriæ* or week-days, of the current years of the *Hejira,* to Calendar time, by the help of which was constructed a large and useful table in *Playfair's* Chronology, p. 305., which is here republished, in an improved form; marking the several cycles, in which the preceding and following years of the Hejira, at the end of one cycle and the beginning of another, are both found to begin in the same *Julian,* or Calendar year, between the limits of the first month, *January,* and the last, *December.* The *first* Cycle of the *Hejira* is broken, containing only 19 years; for it began 14 years earlier: since, 14+19=33 years. The Asterisks (*) mark the Intercalary years of the *Arabs,* in which they adjust their *Lunar* year to the *Solar,* by inserting a month.

TABLE XXII. Years of the Hejira.

CYC.	HEJ.	A. D.	M.	F.	CYC.	HEJ.	A. D.	M.	F.
I.	1	622	July .. 16	6	I.	13*	634	March 7	2
	2*	623	July .. 5	3		14	635	Feb. .. 25	7
	3	624	June .. 24	1		15	636	Feb. .. 14	4
	4	625	June .. 13	5		16*	637	Feb. .. 2	1
	5*	626	June .. 2	2		17	638	Jan. .. 23	6
	6	627	May .. 23	7		18*	639	Jan. .. 12	3
	7*	628	May .. 11	4		19	640	Jan. .. 2	1
	8	629	May .. 1	2	II.	20	640	Dec. .. 21	5
	9	630	April .. 20	6		21*	641	Dec. .. 10	2
	10*	631	April .. 9	3		22	642	Nov. .. 30	7
	11	632	March 29	1		23	643	Nov. .. 19	4
	12	633	March 18	5		24*	644	Nov. .. 7	1

Years of the Hejira.

CYC.	HEJ.	A. D.	M.	F.	CYC.	HEJ.	A. D.	M.	F.
II.	25	645	Oct. .. 28	6	III.	71	690	June .. 15	4
	26*	646	Oct. .. 17	3		72	691	June .. 4	1
	27	647	Oct. .. 7	1		73*	692	May .. 23	5
	28	648	Sept... 25	5		74	693	May .. 13	3
	29*	649	Sept... 14	2		75	694	May .. 2	7
	30	650	Sept... 4	7		76*	695	April .. 21	4
	31	651	Aug... 24	4		77	696	April .. 10	2
	32*	652	Aug... 12	1		78*	697	March 30	6
	33	653	Aug... 2	6		79	698	March 20	4
	34	654	July .. 22	3		80	699	March 9	1
	35*	655	July .. 11	7		81*	700	Feb... 26	5
	36	656	June .. 30	5		82	701	Feb. .. 15	3
	37*	657	June .. 19	2		83	702	Feb. .. 4	7
	38	658	June .. 9	7		84*	703	Jan. .. 24	4
	39	659	May .. 29	4		85	704	Jan. .. 14	2
	40*	660	May .. 17	1		86	705	Jan. .. 2	6
	41	661	May .. 7	6	IV.	87	705	Dec. .. 23	4
	42	662	April .. 26	3		88	706	Dec. .. 12	1
	43*	663	April .. 15	7		89*	707	Dec. .. 1	5
	44	664	April .. 4	5		90	708	Nov... 20	3
	45	665	March 24	2		91	709	Nov... 9	7
	46*	666	March 13	6		92*	710	Oct. .. 29	4
	47	667	March 3	4		93	711	Oct. .. 19	2
	48*	668	Feb... 20	1		94	712	Oct. .. 7	6
	49	669	Feb... 9	6		95*	713	Sept... 26	3
	50	670	Jan. .. 29	3		96	714	Sept... 16	1
	51*	671	Jan. .. 18	7		97*	715	Sept... 5	5
	52	672	Jan. .. 8	5		98	716	Aug... 25	3
III.	53	672	Dec... 27	2		99	717	Aug... 14	7
	54*	673	Dec... 16	6		100*	718	Aug... 3	4
	55	674	Dec... 6	4		101	719	July .. 24	2
	56*	675	Nov... 25	1		102	720	July .. 12	6
	57	676	Nov. . 14	6		103*	721	July .. 1	3
	58	677	Nov... 3	3		104	722	June .. 21	1
	59*	678	Oct. .. 23	7		105	723	June .. 10	5
	60	679	Oct. .. 13	5		106*	724	May .. 29	2
	61	680	Oct. .. 1	2		107	725	May .. 19	7
	62*	681	Sept... 20	6		108*	726	May .. 8	4
	63	682	Sept... 10	4		109	727	April .. 28	2
	64	683	Aug... 30	1		110	728	April .. 16	6
	65*	684	Aug... 18	5		111*	729	April .. 5	3
	66	685	Aug... 8	3		112	730	March 26	1
	67*	686	July .. 28	7		113	731	March 15	5
	68	687	July .. 18	5		114*	732	March 3	2
	69	688	July .. 6	2		115	733	Feb. .. 21	7
	70*	689	June .. 25	6		116*	734	Feb... 10	4

Years of the Hejira.

CYC.	HEJ.	A. D.	M.	F.
IV.	117	735	Jan. ..31	2
	118	736	Jan. ..20	6
	119*	737	Jan. .. 8	3
V.	120	737	Dec. ..29	1
	121	738	Dec. ..18	5
	122*	739	Dec. .. 7	2
	123	740	Nov. ..26	7
	124	741	Nov. ..15	4
	125*	742	Nov. .. 4	1
	126	743	Oct. ..25	6
	127*	744	Oct. ..13	3
	128	745	Oct. .. 3	1
	129	746	Sept. ..22	5
	130*	747	Sept. ..11	2
	131	748	Aug. ..31	7
	132	749	Aug. ..20	4
	133*	750	Aug. .. 9	1
	134	751	July ..30	6
	135	752	July ..18	3
	136*	753	July .. 7	7
	137	754	June ..27	5
	138*	755	June ..16	2
	139	756	June .. 5	7
	140	757	May ..25	4
	141*	758	May ..14	1
	142	759	May .. 4	6
	143	760	April ..22	3
	144*	761	April ..11	7
	145	762	April .. 1	5
	146*	763	March 21	2
	147	764	March 10	7
	148	765	Feb. ..27	4
	149*	766	Feb. ..16	1
	150	767	Feb. .. 6	6
	151	768	Jan. ..26	3
	152*	769	Jan. ..14	7
	153	770	Jan. .. 4	5
VI.	154	770	Dec. ..24	2
	155*	771	Dec. ..13	5
	156	772	Dec. .. 2	4
	157*	773	Nov. ..21	1
	158	774	Nov. ..11	6
	159	775	Oct. ..31	3
	160*	776	Oct. ..19	7
	161	777	Oct. .. 9	5
	162	778	Sept. ..28	2

CYC.	HEJ.	A. D.	M.	F.
VI.	163*	779	Sept. ..17	6
	164	780	Sept. .. 6	4
	165	781	Aug. ..26	1
	166*	782	Aug. ..15	5
	167	783	Aug. .. 5	3
	168*	784	July ..24	7
	169	785	July ..14	5
	170	786	July .. 3	2
	171*	787	June ..22	6
	172	788	June ..11	4
	173	789	May ..31	1
	174*	790	May ..20	5
	175	791	May ..10	3
	176*	792	April ..28	7
	177	793	April ..18	5
	178	794	April .. 7	2
	179*	795	March 27	6
	180	796	March 16	4
	181	797	March 5	1
	182*	798	Feb. ..22	5
	183	799	Feb. ..12	3
	184	800	Feb. .. 1	7
	185*	801	Jan. ..20	4
	186	802	Jan. ..10	2
VII.	187*	802	Dec. ..30	6
	188	803	Dec. ..20	4
	189	804	Dec. .. 8	1
	190*	805	Nov. ..27	5
	191	806	Nov. ..17	3
	192	807	Nov. .. 6	7
	193*	808	Oct. ..25	4
	194	809	Oct. ..15	2
	195	810	Oct. .. 4	6
	196*	811	Sept. ..23	3
	197	812	Sept. ..12	1
	198*	813	Sept. .. 1	5
	199	814	Aug. ..22	3
	200	815	Aug. ..11	7
	201*	816	July ..30	4
	202	817	July ..20	2
	203	818	July .. 9	6
	204*	819	June ..28	3
	205	820	June ..17	1
	206*	821	June .. 6	5
	207	822	May ..27	3
	208	823	May ..16	7

Years of the Hejira.

CYC.	HEJ.	A. D.	M.	F.	CYC.	HEJ.	A. D.	M.	F.
VII.	209*	824	May .. 4	4	IX.	255	868	Dec... 20	2
	210	825	April.. 24	2		256*	869	Dec... 10	7
	211	826	April.. 13	6		257	870	Nov... 29	4
	212*	827	April.. 2	3		258*	871	Nov... 18	1
	213	828	March 22	1		259	872	Nov... 7	6
	214	829	March 11	5		260	873	Oct. .. 27	3
	215*	830	Feb. .. 28	2		261*	874	Oct. .. 16	7
	216	831	Feb. .. 18	7		262	875	Oct. .. 6	5
	217*	832	Feb. .. 7	4		263	876	Sept. .. 24	2
	218	833	Jan. .. 27	2		264*	877	Sept... 13	6
	219	834	Jan. .. 16	6		265	878	Sept... 3	4
	220*	835	Jan. .. 5	3		266*	879	Aug... 23	1
VIII.	221	835	Dec... 26	1		267	880	Aug. .. 12	6
	222	836	Dec... 14	5		268	881	Aug... 1	3
	223*	837	Dec... 3	2		269*	882	July .. 21	7
	224	838	Nov... 23	7		270	883	July .. 11	5
	225	839	Nov... 12	4		271	884	June.. 29	2
	226*	840	Oct. .. 31	1		272*	885	June.. 18	6
	227	841	Oct. .. 21	6		273	886	June.. 8	4
	228*	842	Oct. .. 10	3		274	887	May .. 28	1
	229	843	Sept... 30	1		275*	888	May .. 16	5
	230	844	Sept... 18	5		276	889	May .. 6	3
	231*	845	Sept... 7	2		277*	890	April.. 25	7
	232	846	Aug... 28	7		278	891	April.. 15	5
	233	847	Aug... 17	4		279	892	April.. 3	2
	234*	848	Aug... 5	1		280*	893	March 23	6
	235	849	July .. 26	6		281	894	March 13	4
	236*	850	July .. 15	3		282	895	March 2	1
	237	851	July .. 5	1		283*	896	Feb... 19	5
	238	852	June .. 23	5		284	897	Feb... 8	3
	239*	853	June .. 12	2		285	898	Jan. .. 28	7
	240	854	June.. 2	7		286*	899	Jan... 17	4
	241	855	May .. 22	4		287	900	Jan... 7	2
	242*	856	May .. 10	1	X.	288	900	Dec... 26	6
	243	857	April.. 30	6		289	901	Dec... 16	4
	244	858	April.. 19	3		290	902	Dec... 5	1
	245*	859	April.. 8	7		291*	903	Nov... 24	5
	246	860	March 28	5		292	904	Nov... 13	3
	247*	861	March 17	2		293	905	Nov... 2	7
	248	862	March 7	7		294*	906	Oct. .. 22	4
	249	863	Feb. .. 24	4		295	907	Oct. .. 12	2
	250*	864	Feb. .. 13	1		296*	908	Sept... 30	6
	251	865	Feb. .. 2	6		297	909	Sept... 20	4
	252	866	Jan. .. 22	3		298	910	Sept... 9	1
	253*	867	Jan. .. 11	7		299*	911	Aug... 29	5
	254	868	Jan. .. 1	5		300	912	Aug... 18	3

Years of the Hejira.

CYC.	HEJ.	A. D.	M.	F.	CYC.	HEJ.	A. D.	M.	F.
X.	301	913	Aug... 7	7	XI.	347	958	March 25	5
	302*	914	July..27	4		348*	959	March 14	2
	303	915	July..17	2		349	960	March 3	7
	304	916	July.. 5	6		350	961	Feb...20	4
	305*	917	June..24	4		351*	962	Feb... 9	1
	306	918	June..14	1		352	963	Jan...30	6
	307*	919	June.. 3	5		353	964	Jan...19	3
	308	920	May..23	3		354*	965	Jan... 7	7
	309	921	May..12	7	XII.	355	965	Dec...28	5
	310*	922	May.. 1	4		356*	966	Dec...17	2
	311	923	April..21	2		357	967	Dec... 7	7
	312	924	April.. 9	6		358	968	Nov...25	4
	313*	925	March 29	3		359*	969	Nov...14	1
	314	926	March 19	1		360	970	Nov... 4	6
	315	927	March 8	5		361	971	Oct. ..24	3
	316*	928	Feb...25	2		362*	972	Oct. ..12	7
	317	929	Feb...14	7		363	973	Oct. .. 2	5
	318*	930	Feb... 3	4		364	974	Sept...21	2
	319	931	Jan. ..24	2		365*	975	Sept...10	6
	320	932	Jan. ..13	6		366	976	Aug...30	4
	321*	933	Jan... 1	3		367*	977	Aug...19	1
XI.	322	933	Dec. ..22	1		368	978	Aug... 9	6
	323	934	Dec. ..11	5		369	979	July..29	3
	324*	935	Nov...30	2		370*	980	July..17	7
	325	936	Nov...19	7		371	981	July.. 7	5
	326*	937	Nov... 8	4		372	982	June..26	2
	327	938	Oct. ..29	2		373*	983	June..15	6
	328	939	Oct. ..18	6		374	984	June.. 4	4
	329*	940	Oct. .. 6	3		375	985	May..24	1
	330	941	Sept...26	1		376*	986	May..13	5
	331	942	Sept...15	5		377	987	May.. 3	3
	332*	943	Sept... 4	2		378*	988	April..21	7
	333	944	Aug...24	7		379	989	April..11	5
	334	945	Aug...13	4		380	990	March 31	2
	335*	946	Aug... 2	1		381*	991	March 20	6
	336	947	July..23	6		382	992	March 9	4
	337*	948	July..11	3		383	993	Feb...26	1
	338	949	July.. 1	1		384*	994	Feb...15	5
	339	950	June..20	5		385	995	Feb... 5	3
	340*	951	June.. 9	2		386*	996	Jan...25	7
	341	952	May..29	7		387	997	Jan...14	5
	342	953	May..18	4		388	998	Jan... 3	2
	343*	954	May.. 7	1	XIII.	389	998	Dec...23	6
	344	955	April..27	6		390	999	Dec...13	4
	345	956	April..15	3		391	1000	Dec... 1	1
	346*	957	April.. 4	7		392*	1001	Nov...20	5

YEARS OF THE HEJIRA.

CYC.	HEJ.	A. D.	M.	F.	CYC.	HEJ.	A.D.	M.	F.
XIII.	393	1002	Nov... 10	3	XIV.	439	1047	June..28	1
	394	1003	Oct. ..30	7		440	1048	June.. 16	5
	395*	1004	Oct. .. 18	4		441*	1049	June.. 5	2
	396	1005	Oct. .. 8	2		442	1050	May .. 26	7
	397*	1006	Sept... 27	6		443	1051	May.. 15	4
	398	1007	Sept... 17	4		444*	1052	May .. 3	1
	399	1008	Sept... 5	1		445	1053	April . 23	6
	400*	1009	Aug... 25	5		446*	1054	April . 12	3
	401	1010	Aug... 15	3		447	1055	April . 2	1
	402	1011	Aug... 4	7		448	1056	March 21	5
	403*	1012	July ..23	4		449*	1057	March 10	2
	404	1013	July .. 13	2		450	1058	Feb. ..28	7
	405	1014	July .. 2	6		451	1059	Feb. ..17	4
	406*	1015	June.. 21	3		452*	1060	Feb... 6	1
	407	1016	June ..10	1		453	1061	Jan... 26	6
	408*	1017	May .. 30	5		454	1062	Jan... 15	3
	409	1018	May .. 20	3		455	1063	Jan. .. 4	7
	410	1019	May .. 9	7	XV.	456	1063	Dec... 25	5
	411*	1020	April.. 27	4		457*	1064	Dec... 13	2
	412	1021	April.. 17	2		458	1065	Dec... 3	7
	413	1022	April.. 6	6		459	1066	Nov...22	4
	414*	1023	March 26	3		460*	1067	Nov... 11	1
	415	1024	March 15	1		461	1068	Oct. .. 31	6
	416*	1025	March 4	5		462	1069	Oct. .. 20	3
	417	1026	Feb. .. 22	3		463*	1070	Oct. .. 9	7
	418	1027	Feb. .. 11	7		464	1071	Sept...29	5
	419*	1028	Jan. .. 31	4		465	1072	Sept...17	2
	420	1029	Jan. ..20	2		466*	1073	Sept... 6	6
	421	1030	Jan. .. 9	6		467	1074	Aug...27	4
XIV.	422	1030	Dec. ..29	3		468*	1075	Aug...16	1
	423	1031	Dec... 19	1		469	1076	Aug... 5	6
	424	1032	Dec... 7	5		470	1077	July .. 25	3
	425*	1033	Nov...26	2		471*	1078	July.. 14	7
	426	1034	Nov...16	7		472	1079	July .. 4	5
	427*	1035	Nov... 5	4		473	1080	June..22	2
	428	1036	Oct. .. 25	2		474*	1081	June.. 11	6
	429	1037	Oct. ..14	6		475	1082	June.. 1	4
	430*	1038	Oct. . 3	3		476*	1083	May.. 21	1
	431	1039	Sept.. 23	1		477	1084	May.. 10	6
	432	1040	Sept... 11	5		478	1085	April . 29	3
	433*	1041	Aug... 31	2		479*	1086	April . 18	7
	434	1042	Aug... 21	7		480	1087	April . 8	5
	435	1043	Aug... 10	4		481	1088	March 27	2
	436*	1044	July.. 29	1		482*	1089	March 16	6
	437	1045	July.. 19	6		483	1090	March 6	4
	438*	1046	July.. 8	3		484	1091	Feb... 23	1

Years of the Hejira.

CYC.	HEJ.	A.D.	M.	F.	CYC.	HEJ.	A.D.	M.	F.
XV.	485*	1092	Feb... 12	5	XVII.	531*	1136	Sept...29	3
	486	1093	Feb... 1	3		532	1137	Sept...19	1
	487*	1094	Jan. ..21	7		533	1138	Sept... 8	5
	488	1095	Jan. .. 11	5		534*	1139	Aug...28	2
XVI.	489	1095	Dec. ..31	2		535	1140	Aug...17	7
	490*	1096	Dec... 19	6		536*	1141	Aug... 6	4
	491	1097	Dec... 9	4		537	1142	July .. 27	2
	492	1098	Nov...28	1		538	1143	July .. 16	6
	493*	1099	Nov...17	5		539*	1144	July .. 4	3
	494	1100	Nov... 6	3		540	1145	June.. 24	1
	495	1101	Oct. .. 26	7		541	1146	June.. 13	5
	496*	1102	Oct. .. 15	4		542*	1147	June.. 2	2
	497	1103	Oct. .. 5	2		543	1148	May .. 22	7
	498*	1104	Sept...23	6		544	1149	May .. 11	4
	499	1105	Sept...13	4		545*	1150	April.. 30	1
	500	1106	Sept... 2	1		546	1151	April.. 20	6
	501*	1107	Aug...22	5		547*	1152	April.. 8	3
	502	1108	Aug...11	3		548	1153	March 29	1
	503	1109	July ..31	7		549	1154	March 18	5
	504*	1110	July .. 20	4		550*	1155	March 7	2
	505	1111	July . 10	2		551	1156	Feb... 25	7
	506*	1112	June..28	6		552	1157	Feb. .. 13	4
	507	1113	June.. 18	4		553*	1158	Feb... 2	1
	508	1114	June.. 7	1		554	1159	Jan. .. 23	6
	509*	1115	May .. 27	6		555	1160	Jan. .. 12	3
	510	1116	May ..16	3	XVIII.	556*	1160	Dec...31	7
	511	1117	May .. 5	7		557	1161	Dec... 21	5
	512*	1118	April . 24	4		558*	1162	Dec... 10	2
	513	1119	April . 14	2		559	1163	Nov...30	7
	514	1120	April . 2	6		560	1164	Nov...18	4
	515*	1121	March 22	3		561*	1165	Nov... 7	1
	516	1122	March 12	1		562	1166	Oct. ..28	6
	517*	1123	March 1	5		563	1167	Oct. .. 17	3
	518	1124	Feb. ..19	3		564*	1168	Oct... 5	7
	519	1125	Feb... 7	7		565	1169	Sept...25	5
	520*	1126	Jan. ..27	4		566*	1170	Sept...14	2
	521	1127	Jan... 17	2		567	1171	Sept... 4	7
	522	1128	Jan... 6	6		568	1172	Aug...23	4
XVII.	523*	1128	Dec... 25	3		569*	1173	Aug...12	1
	524	1129	Dec. ..15	1		570	1174	Aug... 2	6
	525	1130	Dec. .. 4	5		571	1175	July ..22	3
	526*	1131	Nov...23	2		572*	1176	July ..10	7
	527	1132	Nov...12	7		573	1177	June.. 30	5
	528*	1133	Nov... 1	4		574	1178	June.. 19	2
	529	1134	Oct. .. 22	2		575*	1179	June.. 8	6
	530	1135	Oct. .. 11	6		576	1180	May .. 28	4

Years of the Hejira.

CYC.	HEJ.	A.D.	M.	F.
XVIII.	577*	1181	May.. 17	1
	578	1182	May.. 7	6
	579	1183	April.. 26	3
	580*	1184	April.. 14	7
	581	1185	April.. 4	5
	582	1186	March 24	2
	583*	1187	March 13	6
	584	1188	March 2	4
	585	1189	Feb... 19	1
	586*	1190	Feb... 8	5
	587	1191	Jan... 29	3
	588*	1192	Jan... 18	7
	589	1193	Jan... 7	5
XIX.	590	1193	Dec... 27	2
	591	1194	Dec... 16	6
	592	1195	Dec... 6	4
	593	1196	Nov... 24	1
	594	1197	Nov... 13	5
	595	1198	Nov... 3	3
	596	1199	Oct... 23	7
	597	1200	Oct... 12	5
	598	1201	Oct... 1	2
	599	1202	Sept... 20	6
	600	1203	Sept... 10	4
	601	1204	Aug... 29	1
	602	1205	Aug... 18	5
	603	1206	Aug... 8	3
	604	1207	July.. 28	7
	605	1208	July.. 16	4
	606	1209	July.. 6	2
	607	1210	June.. 25	6
	608	1211	June.. 15	4
	609	1212	June.. 3	1
	610	1213	May.. 23	5
	611	1214	May.. 13	3
	612	1215	May.. 2	7
	613	1216	April.. 20	4
	614	1217	April.. 10	2
	615	1218	March 30	6
	616	1219	March 19	3
	617	1220	March 8	1
	618	1221	Feb... 25	5
	619	1222	Feb... 15	3
	620	1223	Feb... 4	7
	621	1224	Jan... 24	4
	622	1225	Jan... 13	2
XIX.	623	1226	Jan... 2	6
XX.	624	1226	Dec... 22	3
	625	1227	Dec... 12	1
	626*	1228	Nov... 30	5
	627	1229	Nov... 20	3
	628	1230	Nov... 9	7
	629*	1231	Oct... 29	4
	630	1232	Oct... 18	2
	631	1233	Oct... 7	6
	632*	1234	Sept... 26	3
	633	1235	Sept... 16	1
	634	1236	Sept... 4	5
	635*	1237	Aug... 24	2
	636	1238	Aug... 14	7
	637*	1239	Aug... 3	4
	638	1240	July.. 23	2
	639	1241	July.. 12	6
	640*	1242	July.. 1	3
	641	1243	June.. 21	1
	642	1244	June.. 9	5
	643*	1245	May.. 29	2
	644	1246	May.. 19	7
	645	1247	May.. 8	4
	646*	1248	April.. 26	I
	647	1249	April.. 16	6
	648*	1250	April.. 5	3
	649	1251	March 26	1
	650	1252	March 14	5
	651*	1253	March 3	2
	652	1254	Feb... 21	7
	653	1255	Feb... 10	4
	654*	1256	Jan... 30	1
	655	1257	Jan... 19	6
	656*	1258	Jan... 8	3
XXI.	657	1258	Dec... 29	1
	658	1259	Dec... 18	5
	659	1260	Dec... 6	2
	660	1261	Nov... 26	7
	661	1262	Nov... 15	4
	662	1263	Nov... 4	1
	663	1264	Oct... 24	6
	664	1265	Oct... 13	3
	665	1266	Oct... 2	7
	666	1267	Sept... 22	5
	667	1268	Sept... 10	2
	668	1269	Aug... 31	7

Years of the Hejira.

CYC.	HEJ.	A.D.	M.	F.	CYC.	HEJ.	A.D.	M.	F.
XXI.	669	1270	Aug... 20	4	XXII.	715	1315	April.. 7	2
	670	1271	Aug... 9	1		716*	1316	March 26	6
	671	1272	July.. 29	6		717	1317	March 16	4
	672	1273	July.. 18	3		718	1318	March 5	1
	673	1274	July.. 7	7		719*	1319	Feb... 22	5
	674	1275	June.. 27	5		720	1320	Feb... 12	3
	675	1276	June.. 15	2		721	1321	Jan... 31	7
	676	1277	June.. 4	6		722*	1322	Jan. ..20	4
	677	1278	May.. 25	4		723	1323	Jan. ..10	2
	678	1279	May ..14	1	XXIII.	724	1323	Dec... 30	6
	679	1280	May.. 3	6		725*	1324	Dec... 18	3
	680	1281	April. 22	3		726	1325	Dec... 8	1
	681	1282	April.. 11	7		727*	1326	Nov... 27	5
	682	1283	April.. 1	5		728	1327	Nov... 17	3
	683	1284	March 20	2		729	1328	Nov... 5	7
	684	1285	March 9	6		730*	1329	Oct... 25	4
	685	1286	Feb. ..27	4		731	1330	Oct... 15	2
	686	1287	Feb... 16	1		732	1331	Oct... 4	6
	687	1288	Feb... 6	6		733*	1332	Sept... 22	3
	688	1289	Jan... 25	3		734	1333	Sept... 12	1
	689	1290	Jan... 14	7		735	1334	Sept... 1	5
	690	1291	Jan... 4	5		736*	1335	Aug... 21	2
XXII.	691	1291	Dec... 24	2		737	1336	Aug... 10	7
	692*	1292	Dec... 12	6		738*	1337	July ..30	4
	693	1293	Dec... 2	4		739	1338	July.. 20	2
	694	1294	Nov... 21	1		740	1339	July.. 9	6
	695*	1295	Nov... 10	5		741*	1340	June.. 27	3
	696	1296	Oct. ..30	3		742	1341	June.. 17	1
	697*	1297	Oct. ..19	7		743	1342	June.. 6	5
	698	1298	Oct. .. 9	5		744*	1343	May.. 26	2
	699	1299	Sept... 28	2		745	1344	May.. 15	7
	700*	1300	Sept... 16	6		746*	1345	May.. 4	4
	701	1301	Sept... 6	4		747	1346	April. 24	2
	702	1302	Aug... 26	1		748	1347	April. 13	6
	703*	1303	Aug... 15	5		749*	1348	April.. 1	3
	704	1304	Aug... 4	3		750	1349	March 22	1
	705	1305	July.. 24	7		751	1350	March 11	5
	706*	1306	July.. 13	4		752*	1351	Feb... 28	2
	707	1307	July.. 3	2		753	1352	Feb... 18	7
	708*	1308	June.. 21	6		754	1353	Feb... 6	4
	709	1309	June.. 11	4		755*	1354	Jan... 26	1
	710	1310	May ..31	1		756	1355	Jan... 16	6
	711*	1311	May.. 20	5		757*	1356	Jan... 5	3
	712	1312	May.. 9	3	XXIV.	758	1356	Dec... 25	1
	713	1313	April.. 28	7		759	1357	Dec... 14	5
	714*	1314	April.. 17	4		760*	1358	Dec... 3	2

Years of the Hejira.

CYC.	HEJ.	A.D.	M.	F.
XXIV.	761	1359	Nov...23	7
	762	1360	Nov...11	4
	763*	1361	Oct. ..31	1
	764	1362	Oct. ..21	6
	765	1363	Oct. ..10	3
	766*	1364	Sept...28	7
	767	1365	Sept...18	5
	768*	1366	Sept... 7	2
	769	1367	Aug...28	7
	770	1368	Aug...16	4
	771*	1369	Aug... 5	1
	772	1370	July..26	6
	773	1371	July..15	3
	774*	1372	July.. 3	7
	775	1373	June..23	5
	776*	1374	June..12	2
	777	1375	June.. 2	7
	778	1376	May..21	4
	779*	1377	May..10	1
	780	1378	April..30	6
	781	1379	April..19	3
	782*	1380	April.. 7	7
	783	1381	March 28	5
	784	1382	March 17	2
	785*	1383	March 6	6
	786	1384	Feb...24	4
	787*	1385	Feb...12	1
	788	1386	Feb. .. 2	6
	789	1387	Jan...22	3
	790*	1388	Jan...11	7
XXV.	791	1388	Dec...31	5
	792	1389	Dec. ..20	2
	793*	1390	Dec... 9	6
	794	1391	Nov...29	4
	795	1392	Nov...17	1
	796*	1393	Nov... 6	5
	797	1394	Oct. ..27	3
	798*	1395	Oct. ..16	7
	799	1396	Oct. .. 5	5
	800	1397	Sept...24	2
	801*	1398	Sept...13	6
	802	1399	Sept... 3	4
	803	1400	Aug...22	1
	804*	1401	Aug...11	5
	805	1402	Aug... 1	3
	806*	1403	July..21	7

CYC.	HEJ.	A.D.	M.	F.
XXV.	807	1404	July..10	1
	808	1405	June..29	2
	809*	1406	June..18	6
	810	1407	June.. 8	4
	811	1408	May..27	1
	812*	1409	May ..16	5
	813	1410	May.. 6	3
	814	1411	April..25	7
	815*	1412	April..14	4
	816	1413	April.. 3	2
	817*	1414	March 23	6
	818	1415	March 13	4
	819	1416	March 1	1
	820*	1417	Feb. ..18	5
	821	1418	Feb... 8	3
	822	1419	Jan. ..28	7
	823*	1420	Jan. ..17	4
	824	1421	Jan... 6	2
XXVI.	825	1421	Dec...26	6
	826*	1422	Dec...15	3
	827	1423	Dec... 5	1
	828*	1424	Nov...23	5
	829	1425	Nov...13	3
	830	1426	Nov... 2	7
	831*	1427	Oct. ..22	4
	832	1428	Oct. ..11	2
	833	1429	Sept...30	6
	834*	1430	Sept...19	3
	835	1431	Sept... 9	1
	836*	1432	Aug...28	5
	837	1433	Aug...18	3
	838	1434	Aug... 7	7
	839*	1435	July..27	4
	840	1436	July..16	2
	841	1437	July.. 5	6
	842*	1438	June..24	3
	843	1439	June..14	1
	844	1440	June.. 2	5
	845*	1441	May..22	2
	846	1442	May..12	7
	847*	1443	May.. 1	4
	848	1444	April..20	2
	849	1445	April.. 9	6
	850*	1446	March 29	3
	851	1447	March 19	1
	852	1448	March 7	5

YEARS OF THE HEJIRA.

CYC.	HEJ.	A.D.	M.	F.	CYC.	HEJ.	A.D.	M.	F.
XXVI.	853*	1449	Feb...24	2	XXVIII.	899*	1493	Oct. ..12	7
	854	1450	Feb...14	7		900	1494	Oct. .. 2	5
	855	1451	Feb... 3	4		901	1495	Sept..21	2
	856*	1452	Jan...23	1		902*	1496	Sept... 9	6
	857	1453	Jan...12	6		903	1497	Aug...30	4
	858*	1454	Jan... 1	3		904	1498	Aug...19	1
XXVII.	859	1454	Dec...22	1		905*	1499	Aug... 8	5
	860	1455	Dec...11	5		906	1500	July..28	3
	861*	1456	Nov...29	2		907*	1501	July..17	7
	862	1457	Nov...19	7		908	1502	July .. 7	5
	863	1458	Nov... 8	4		909	1503	June..26	2
	864*	1459	Oct...28	1		910*	1504	June..14	6
	865	1460	Oct...17	6		911	1505	June.. 4	4
	866*	1461	Oct... 6	3		912	1506	May..24	1
	867	1462	Sept...26	1		913*	1507	May..13	5
	868	1463	Sept...15	5		914	1508	May.. 2	3
	869*	1464	Sept... 3	2		915	1509	April..21	7
	870	1465	Aug...24	7		916*	1510	April..10	4
	871	1466	Aug...13	4		917	1511	March 31	2
	872*	1467	Aug... 2	1		918*	1512	March 19	6
	873	1468	July..22	6		919	1513	March 9	4
	874	1469	July..11	3		920	1514	Feb. ..26	1
	875*	1470	June..30	7		921*	1515	Feb. ..15	5
	876	1471	June..20	5		922	1516	Feb... 5	3
	877*	1472	June.. 8	2		923	1517	Jan...24	7
	878	1473	May ..29	7		924*	1518	Jan...13	4
	879	1474	May..18	4		925	1519	Jan... 3	2
	880*	1475	May.. 7	1	XXIX.	926	1519	Dec...23	6
	881	1476	April..26	6		927	1520	Dec...12	4
	882	1477	April..15	3		928	1521	Dec... 1	1
	883*	1478	April.. 4	7		929*	1522	Nov...20	5
	884	1479	March 25	5		930	1523	Nov...10	3
	885	1480	March 13	2		931	1524	Oct. ..29	7
	886*	1481	March 2	6		932*	1525	Oct ..18	4
	887	1482	Feb. ..20	4		933	1526	Oct. .. 8	2
	888*	1483	Feb... 9	1		934	1527	Sept...27	6
	889	1484	Jan...30	6		935*	1528	Sept...15	3
	890	1485	Jan. ..18	3		936	1529	Sept... 5	1
	891*	1486	Jan... 7	7		937*	1530	Aug...25	5
XXVIII.	892	1486	Dec...28	5		938	1531	Aug...15	3
	893	1487	Dec...17	2		939	1532	Aug... 3	7
	894*	1488	Dec... 5	6		940*	1533	July .23	4
	895	1489	Nov...25	4		941	1534	July..13	2
	896*	1490	Nov...14	1		942	1535	July.. 2	6
	897	1491	Nov... 4	6		943*	1536	June..20	3
	898	1492	Oct. ..23	3		944	1537	June..10	1

YEARS OF THE HEJIRA.

CYC.	HEJ.	A.D.	M.	F.
XXIX.	945	1538	May..30	5
	946*	1539	May..19	2
	947	1540	May.. 8	7
	948*	1541	April..27	4
	949	1542	April.. 6	2
	950	1543	March 25	6
	951*	1544	March 15	3
	952	1545	March 4	1
	953	1546	Feb...21	5
	954*	1547	Feb. .11	2
	955	1548	Jan. ..30	7
	956*	1549	Jan. ..20	4
	957	1550	Jan. .. 9	2
	958	1551	Dec...29	6
XXX.	959*	1551	Dec...29	3
	960	1552	Dec. ..18	1
	961	1553	Dec... 7	5
	962*	1554	Nov...26	2
	963	1555	Nov...16	7
	964	1556	Nov... 4	4
	965*	1557	Oct. . 24	1
	966	1558	Oct. ..14	6
	967*	1559	Oct. .. 3	3
	968	1560	Sept...22	1
	969	1561	Sept...11	5
	970*	1562	Aug...31	2
	971	1563	Aug...21	7
	972	1564	Aug... 9	4
	973*	1565	July ..29	1
	974	1566	July ..19	6
	975	1567	July.. 8	3
	976*	1568	June..26	7
	977	1569	June..16	5
	978*	1570	June.. 5	2
	979	1571	May ..26	7
	980	1572	May ..14	4
	981*	1573	May.. 3	1
	982	1574	April..23	6
	983	1575	April..12	3
	984*	1576	March 31	7
	985	1577	March 21	5
	986*	1578	March 10	2
	987	1579	Feb...28	7
	988	1580	Feb...17	4
	989*	1581	Feb... 5	1
	990	1582	Jan. ..26	6
XXX.	991	1583	Jan. ..15	3
	992*	1584	Jan... 4	7
	993	1585	Dec. ..24	5
XXXI.	994	1585	Dec...13	2
	995*	1586	Dec... 2	6
	996	1587	Nov...22	4
	997*	1588	Nov...10	1
	998	1589	Oct. ..31	6
	999	1590	Oct. ..20	3
	1000*	1591	Oct... 9	7
	1001	1592	Sept...28	5
	1002	1593	Sept...17	2
	1003*	1594	Sept...16	6
	1004	1595	Aug...27	4
	1005	1596	Aug...15	1
	1006*	1597	Aug... 4	5
	1007	1598	July..25	3
	1008*	1599	July ..14	7
	1009	1600	July.. 3	5
	1010	1601	June..22	2
	1011*	1602	June..11	6
	1012	1603	June.. 1	4
	1013	1604	May..20	1
	1014*	1605	May .. 9	5
	1015	1606	April..29	3
	1016*	1607	April..18	7
	1017	1608	April.. 7	5
	1018	1609	March 27	2
	1019*	1610	March 16	6
	1020	1611	March 6	4
	1021	1612	Feb. ..23	1
	1022*	1613	Feb...11	5
	1023	1614	Feb... 1	3
	1024	1615	Jan. ..21	7
	1025*	1616	Jan. ..10	4
	1026	1617	Dec...30	2
XXXII.	1027	1617	Dec...19	6
	1028	1618	Dec... 9	4
	1029	1619	Nov...28	1
	1030*	1620	Nov...16	5
	1031	1621	Nov... 6	3
	1032	1622	Oct. ..26	7
	1033*	1623	Oct. ..15	4
	1034	1624	Oct. .. 4	2
	1035	1625	Sept...23	6
	1036*	1626	Sept...12	3

Years of the Hejira.

CYC.	HEJ.	A.D.	M.	F.
XXXII.	1037	1627	Sept... 2	1
	1038*	1628	Aug... 21	5
	1039	1629	Aug... 11	3
	1040	1630	July.. 31	7
	1041*	1631	July.. 20	4
	1042	1632	July.. 9	2
	1043	1633	June.. 28	6
	1044*	1634	June.. 17	3
	1045	1635	June.. 7	1
	1046*	1636	May.. 26	5
	1047	1637	May.. 16	3
	1048	1638	May.. 5	7
	1049*	1639	April.. 24	4
	1050	1640	April.. 13	2
	1051	1641	April.. 2	6
	1052*	1642	March 22	3
	1053	1643	March 12	1
	1054	1644	Feb... 28	5
	1055*	1645	Feb... 17	2
	1056	1646	Feb... 7	7
	1057*	1647	Jan... 27	4
	1058	1648	Jan... 17	2
	1059	1649	Jan... 5	6
	1060*	1650	Dec... 25	3
XXXIII.	1061	1650	Dec... 15	1
	1062	1651	Dec... 4	5
	1063*	1652	Nov... 22	2
	1064	1653	Nov... 12	7
	1065	1654	Nov... 1	4
	1066*	1655	Oct... 21	1
	1067	1656	Oct... 10	6
	1068*	1657	Sept... 29	3
	1069	1658	Sept... 19	1
	1070	1659	Sept... 8	5
	1071*	1660	Aug... 27	2
	1072	1661	Aug... 17	7
	1073	1662	Aug... 6	4
	1074*	1663	July.. 26	1
	1075	1664	July.. 15	6
	1076*	1665	July.. 4	3
	1077	1666	June.. 24	1
	1078	1667	June.. 13	5
	1079*	1668	June.. 1	2
	1080	1669	May.. 22	7
	1081	1670	May.. 11	4
	1082*	1671	April.. 30	1
XXXIII.	1083	1672	April.. 19	6
	1084	1673	April.. 8	3
	1085*	1674	March 28	7
	1086	1675	March 18	5
	1087*	1676	March 6	2
	1088	1677	Feb... 24	7
	1089	1678	Feb... 23	4
	1090*	1679	Feb... 2	1
	1091	1680	Jan... 23	6
	1092	1681	Jan... 11	3
	1093*	1682	Dec... 31	7
XXXIV.	1094	1682	Dec... 21	5
	1095	1683	Dec... 10	2
	1096*	1684	Nov... 28	6
	1097	1685	Nov... 18	4
	1098*	1686	Nov... 7	1
	1099	1687	Oct... 28	6
	1100	1688	Oct... 16	3
	1101*	1689	Oct... 5	7
	1102	1690	Sept... 25	5
	1103	1691	Sept... 14	2
	1104*	1692	Sept... 2	6
	1105	1693	Aug... 23	4
	1106*	1694	Aug... 12	1
	1107	1695	Aug... 2	6
	1108	1696	July.. 21	3
	1109*	1697	July.. 10	7
	1110	1698	June.. 30	5
	1111	1699	June.. 19	2
	1112*	1700	June.. 7	6
	1113	1701	May.. 28	4
	1114	1702	May.. 17	1
	1115*	1703	May.. 6	5
	1116	1704	April.. 25	3
	1117*	1705	April.. 14	7
	1118	1706	April.. 4	5
	1119	1707	March 24	2
	1120*	1708	March 12	6
	1121	1709	March 2	4
	1122	1710	Feb... 19	1
	1123*	1711	Feb... 8	5
	1124	1712	Jan... 29	3
	1125	1713	Jan... 17	7
	1126*	1714	Jan... 6	4
	1127	1715	Dec... 27	2
XXXV.	1128*	1715	Dec... 16	6

YEARS OF THE HEJIRA.

CYC.	HEJ.	A.D.	M.	F.	CYC.	HEJ.	A.D.	M.	F.
XXXV.	1129	1716	Dec... 5	4	XXXV.	1148	1735	May..13	3
	1130	1717	Nov...24	1		1149	1736	May .. 1	7
	1131*	1718	Nov...13	5		1150*	1737	April 20	4
	1132	1719	Nov... 3	3		1151	1738	April 10	2
	1133	1720	Oct... 22	7		1152	1739	March 30	6
	1134*	1721	Oct... 11	4		1153*	1740	March 18	3
	1135	1722	Oct.... 1	2		1154	1741	March 8	1
	1136*	1723	Sept...20	6		1155	1742	Feb... 25	5
	1137	1724	Sept... 9	4		1156*	1743	Feb... 14	2
	1138	1725	Aug...29	1		1157	1744	Feb. .. 4	7
	1139*	1726	Aug...18	5		1158*	1745	Jan... 23	4
	1140	1727	Aug. .. 8	3		1159	1746	Jan... 13	2
	1141	1728	July..27	7		1160	1747	Jan. . 2	6
	1142*	1729	July..16	4		1161*	1748	Dec. ..22	3
	1143	1730	July... 6	2	XXXVI.	1162	1748	Dec...11	1
	1144	1731	June..25	6		1163	1749	Nov...30	5
	1145*	1732	June..13	3		1164*	1750	Nov...19	2
	1146	1733	June .. 3	1		1165	1751	Nov. .. 9	7
	1147*	1734	May..23	5					

			O. S.	N. S.	
CYC.	HEJ.	A.D.	M.O.S.	M.N.S.	F.
XXXVI.	1166*	1752†	October 28	November....8	4
	1167	1753	October 18	October 29	2
	1168	1754	October 7	October 18	6
	1169*	1755	September .. 26	October 7	3
	1170	1756	September .. 15	September .. 26	1
	1171	1757	September .. 4	September .. 15	5
	1172*	1758	August. 24	September .. 4	2
	1173	1759	August 14	August 25	7
	1174	1760	August 2	August 13	4
	1175*	1761	July 22	August 2	1
	1176	1762	July 12	July 23	6
	1177*	1763	July 1	July 12	3
	1178	1764	June 20	July 1	1
	1179	1765	June 9	June 20	5
	1180*	1766	May 29	June 9	2
	1181	1767	May 19	May 30	7
	1182	1768	May 7	May 18	4
	1183*	1769	April....... 26	May 7	1
	1184	1770	April 16	April 27	6
	1185	1771	April 5	April 16	3
	1186*	1772	March...... 24	April 4	7

† In 1752, when the *New Style* began, *eleven* days were omitted, from Sept. 3 to Sept. 14.

YEARS OF THE HEJIRA.

CYC.	HEJ.	A.D.	M.O.S.	M.N.S.	F.
XXXVI.	1187	1773	March 14	March...... 25	5
	1188*	1774	March 3	March...... 14	2
	1189	1775	February.... 21	March...... 4	7
	1190	1776	February.... 10	February.... 21	4
	1191*	1777	January 29	February.... 9	1
	1192	1778	January 19	January 30	6
	1193	1779	January 8	January 19	3
	1194*	1780	Decem. 28, 1779	January 8	7
XXXVII.	1195	1780	December ... 17	December .. 28	5
	1196*	1781	December.... 6	December .. 17	2
	1197	1782	November....26	December .. 7	7
	1198	1783	November .. 15	November .. 26	4
	1199*	1784	November .. 3	November .. 14	1
	1200	1785	October 24	November .. 4	6
	1201	1786	October 13	October 24	3
	1202*	1787	October 2	October 13	7
	1203	1788	September .. 21	October 2	5
	1204	1789	September .. 10	September .. 21	2
	1205*	1790	August 30	September .. 10	6
	1206	1791	August 20	August 31	4
	1207*	1792	August 8	August 19	1
	1208	1793	July 29	August 9	6
	1209	1794	July 18	July 29	3
	1210*	1795	July 7	July 18	7
	1211	1796	June 26	July 7	5
	1212	1797	June 15	June 26	2
	1213*	1798	June 4	June 15	6
	1214	1799	May 25	June 5	4
	1215	1800†	May 13	May 24	1
	1216*	1801	May 2	May 13	5
	1217	1802	April 22	May 3	3
	1218*	1803	April 11	April 22	7
	1219	1804	March...... 31	April 11	5
	1220	1805	March...... 20	March...... 31	2
	1221*	1806	March...... 9	March 20	6
	1222	1807	February 27	March...... 10	4
	1223	1808	February.... 16	February 27	1
	1224*	1809	February.... 4	February 15	5
	1225	1810	January 25	February 5	3
	1226*	1811	January 14	January 25	7
	1227	1812	January 4	January 15	5
	1228	1813	Dec. (1812) 23	January 3	2

† From 1800, *twelve* days are omitted, improperly, by *Playfair;* for the omission of 12 days will not take place till A.D. 1900: therefore all his numbers are here lowered; May 25 to May 24, &c. to the end.

YEARS OF THE HEJIRA.

CYC.	HEJ.	A.D.	M.O.S.	M.N.S.	F.
XXXVIII.	1229*	1813	December ... 12	December .. 23	6
	1230	1814	December ... 2	December .. 13	4
	1231	1815	November .. 21	December .. 2	1
	1232*	1816	November .. 9	November .. 20	5
	1233	1817	October 30	November .. 10	3
	1234	1818	October 19	October 30	7
	1235*	1819	October 8	October 19	4
	1236	1820	September .. 27	October 8	2
	1237*	1821	September .. 16	September .. 27	6
	1238	1822	September .. 6	September .. 17	4
	1239	1823	August 26	September .. 6	1
	1240*	1824	August 14	August 25	5
	1241	1825	August 4	August 15	3
	1242	1826	July 24	August 4	7
	1243*	1827	July 13	July 24	4
	1244	1828	July 2	July 13	2
	1245	1829	June 21	July 2	6
	1246*	1830	June 10	June 21	3
	1247	1831	May 31	June 11	1
	1248*	1832	May 19	May 30	5
	1249	1833	May 9	May 20	3
	1250	1834	April 28	May 9	7
	1251*	1835	April 17	April 28	4
	1252	1836	April 6	April 17	2
	1253	1837	March...... 26	April 6	6
	1254*	1838	March..... 15	March...... 26	3
	1255	1839	March...... 5	March...... 16	1
	1256*	1840	February.... 22	March...... 4	5
	1257	1841	February.... 11	February.... 22	3
	1258	1842	January 31	February.... 11	7
	1259*	1843	January 20	January 31	4
	1260	1844	January 10	January 21	2
	1261	1845	Dec. (1844) 29	January 9	6
XXXIX.	1262*	1845	December .. 18	December .. 29	3
	1263	1846	December.... 8	December .. 19	1
	1264	1847	November .. 27	December .. 8	5
	1265*	1848	November .. 15	November .. 26	2
	1266	1849	November .. 5	November .. 16	7
	1267*	1850	October 25	November .. 5	4
	1268	1851	October 15	October 26	2
	1269	1852	October 3	October 14	6
	1270*	1853	September .. 22	October 3	3
	1271	1854	September .. 12	September .. 23	1
	1272	1855	September .. 1	September .. 12	5
	1273*	1856	August 20	August 31	2
	1274	1857	August 10	August 21	7

YEARS OF THE HEJIRA.

CYC.	HEJ.	A.D.	M.O.S.	N.S.	F.
XXXIX.	1275	1858	July........ 30	August 10	4
	1276*	1859	July........ 19	July 30	1
	1277	1860	July 8	July 19	6
	1278*	1861	June 27	July 8	3
	1279	1862	June 17	June 28	1
	1280	1863	June 6	June 17	5
	1281*	1864	May 25	June 5	2
	1282	1865	May 15	May 26	7
	1283	1866	May 4	May 15	4
	1284*	1867	April 23	May 4	1
	1285	1868	April 12	April 23	6
	1286*	1869	April 1	April 12	3
	1287	1870	March....... 22	April 2	1
	1288	1871	March...... 11	March 22	5
	1289*	1872	February.... 28	March....... 10	2
	1290	1873	February.... 17	February 28	7
	1291	1874	February 6	February.... 17	4
	1292*	1875	January 26	February.... 6	1
	1293	1876	January 16	January 27	6
	1294	1877	January 4	January 15	3
	1295*	1878	Dec. (1877) 24	January 4	6
XL.	1296	1878	December .. 14	December .. 25	5
	1297*	1879	December .. 3	December .. 14	2
	1298	1880	November .. 22	December .. 3	7
	1299	1881	November .. 11	November .. 22	4
	1300*	1882	October 31	November .. 11	1
	1301	1883	October 21	November .. 1	6
	1302	1884	October 9	October 20	3
	1303*	1885	September .. 28	October 9	7
	1304	1886	September .. 18	September .. 29	5
	1305	1887	September .. 7	September .. 18	2
	1306*	1888	August 26	September .. 6	6
	1307	1889	August 16	August 27	4
	1308*	1890	August 5	August 16	1
	1309	1891	July 26	August 6	6
	1310]	1892	July 14	July 25	3
	1311*	1893	July 3	July 14	7
	1312	1894	June 23	July 4	5
	1313	1895	June 12	June 23	2
	1314*	1896	May 31	June 11	6
	1315	1897	May 21	June 1	4
	1316*	1898	May 10	May 21	1
	1317	1899	April 30	May 11	6
	1318	1900	April 18	April 30	3

N.B. In the intercalary years, marked by the asterisks, the twelfth month, *Dulheggia*, consists of 30 days. The *feriæ* all along are accommodated to the *Old Style*.

The use of this XXIId. Table, of the *Years of the Hejira*, &c. may be thus illustrated.

Al Junabi, an Arab historian, relates that *Mahomet Khan* took *Constantinople* in the 857th year of the *Hejira*, on the 20th day of *Jomad* I., the *third* day of the week, or Tuesday. *Pocock's* Supplement to his Latin translation of *Abulfaragi*, p. 47. But by this Table, the 857th of the *Hejira*, began A.D. 1453, Jan. 12, on the sixth day of the week, or Friday. And by the foregoing Table of *Arabian* months, the 20th of *Jomad* I. was 137 days complete from the first day of the first month, *Muharram*, or $12 + 137 = 149$ days, counted from the first of January, A.D. 1453, which corresponds to May 29, according to Table IV. of *Julian* days. But the Cycle of the sun, that year, was 6, the Dominical letter G, the character of May 29, B. It was, therefore, the third day of the week, or Tuesday. And how critically this calculation corresponds to the fact, appears from the patriarchal history of *Crusius*, thus stating the capture of the city. *Ησαν χρονοι απο Χριστου γενεσεως χιλιοι τετρακοσιοι πεντηκοντα τρεις. Μαιῳ εικοστῃ ενvατῃ, ἡμερᾳ τριτῃ.* "It was 1453 years from Christ's nativity, on the 29th of May, the third day of the week."

Such a minute coincidence between the *Mahometan* and *Christian* historians, respecting this important date, is highly gratifying, and it affords an instance of the great ingenuity and accuracy of the chronological rules and tables in question; and especially of the value of this Table, which gives, at first sight, the result of a long and intricate calculation, by which *Beveridge* comes to the same conclusion, pp. 119—127.

The following easy rule will serve, without the Tables, to reduce the current years of the Hejira, to Julian, or Calendar years.

Sincc 100 *years of the Hejira are equal to* 97 *Julian years, multiply the centuries in the proposed year by* 3; *and to the product add* 1, *for each additional cycle; subtract the amount from the proposed year; and add* 621 *to the remainder. The sum will give the calendar year required.*

Thus, in the year of the Hejira 699, *Othman*, the founder of the Turkish empire, assumed the title of *Sultan*. Multiply the number of centuries, 7, by 3; which gives 21, the number of *Julian* years omitted; subtract this from 699, and the remainder, 678, added to the elapsed 621 *Julian* years, before the era of the *Hejira* commenced, gives A.D. 1299, the same as in the

Table. When the year proposed, however, is the last of a Cycle, it will give the result a year short.

INDIAN ERAS.

Megasthenes, a native of *Persia*, who enjoyed the confidence of *Seleucus Nicator*, and of *Sibyrtius*, governor of *Aracosia*, (the modern *Candahar* and *Gazni)* was frequently sent by them on embassies to the court of *Chandra Gupta*, (called *Sandrocuptos* and *Sandraccottus* by the Greek historians) and also resided at the court of *Porus*. He wrote a history of *Indian* affairs, which is unfortunately lost, as from his country, his abilities, and his opportunities of conversing with the most learned and intelligent *Hindus*, we might have derived from it much authentic information on the subject. See *Asiat. Research.* Vol. V. p. 242, 290, &c.

In a fragment, however, preserved by *Clemens Alexandrinus*, he declares, that "the *Hindus* and the *Jews* were the only people who had a just conception of the creation of the world, and of the beginning of things;" and he states, that "the *Hindus* did not carry back their history and antiquities above 5042 years * and three months, from *Alexander's* invasion of India," B.C. 327. Their earliest era, therefore, B.C. 5369, differs only 42 years from the rectified Era of the Creation, B.C. 5411.

Since his time, the *Brahmins* have invented eras of the most extravagant antiquity, which are, in fact, no other than vast *Astronomical* Cycles, formed by retrospective calculation, like the *Julian* Period; and this is demonstrated by Mr. *Davis*, in the *Asiatic Researches*, Vol. II. p. 228, in a very ingenious communication *on the Astronomical Computations of the Hindus.* There, he states, that the *Hindu* astronomers chose as a radix, from which to compute the planetary motions, that point of time counted back, when they must have been in conjunction in the beginning of *Mesha*, or *Aries*, and coeval with which they supposed the Creation. Taking also into computation a slow motion of the Nodes and Apsides, which they had discovered, they found that it would require a vast cycle of 4320 millions of years, before the planets would return precisely to the same situation again. This grand Anomalistic period they denomi-

* Some manuscripts read 6042 years, but the other reading agrees better with the *Mosaical* account.

nated a *Calpa*. The *Calpa* they divided into 1000 *Maha yugas*, or " great conjunctions," each consisting of 4,320,000 years, and a *Maha yuga* into ten lesser *yugas*, consisting each of 432,000 years. The *Maha yuga* was an Anomalistical period of the sun and moon, at the end of which, the moon, her apogee, and ascending node, are to be found in conjunction with the sun in the first of *Aries;* the planets also deviating from that point only as much as is their latitude, and the difference between their mean and true anomaly.

HINDU AGES OF THE WORLD.

The *Maha yuga* was also divided into four lesser *yugas*, or ages, which seem to have been formed on ideas similar to the *Golden*, *Silver*, *Brazen*, and *Iron* Ages of the *Greeks;* " according to the different proportions of *virtue* prevailing on earth," in the language of *Surya Sidhanta*, their oldest astronomical treatise.

		Y.
1. *Satya yuga*	4 × 432,000	= 1,728,000
2. *Treta yuga*................	3 × 432,000	= 1,296,000
3. *Duapar yuga*......	2 × 432,000	= 864,000
4. *Cali yuga*	1 × 432,000	= 432,000
Maha yuga	10 × 432,000	= 4,320,000

In the *Satya*, or Age of " Virtue," four parts or all mankind were supposed to be good; in the *Treta*, or *Treda*, " three" parts; in the *Dwapar*, *Duapar*, or *Duabara*, " two" parts; and in the *Cali yuga*, or " black conjunction," only one part. The common factor, 432,000 years, was shewn in the preceding article on Years, to have been formed of the great astronomical cycle of 24,000 years, comprising the grand revolution of the sphere of the fixed stars, occasioned by the precession of the equinoxes, 54 seconds per annum, according to the *Hindu* calculation; multiplied by 18 years, the Chaldean *Saros*, or *Plinian* period of the lunar inequalities. These four ages composed a *Maha yuga*, and a thousand *Maha yugas* one *Calpa*, or " a day" of *Brahma*, " the Creator." A sublime idea, corresponding to Scripture. Ps. xc. 4; 2 Pet. iii. 8.

It is agreed by the Hindu astronomers in general, that the *Cali yuga*, or last age, under which mankind now live, began when the equinoctial points were in the first degrees of *Mesha*

and *Tula*, or *Aries* and *Libra*, B.C. 3102. *Asiat. Research.* Vol. II. p. 274, and p. 392.

The *Cali yuga* was the Hindu era of the Deluge. This is ingeniously collected by Captain *Wilford*, from the famous Arabian astronomer *Albumazar*, or *Abu-mazar*, about the middle of the ninth century, who lived in the court of the Caliph *Al Mamum*, and carefully studied the Hindu antiquities, especially the time of the creation of the world, its duration, and the conjunctions of the planets. He represented, that "the *Hindus* reckoned from the Flood to the Hejira, 720,634,442,715 days, *or* 3725 years." *Asiat. Research.* Vol. V. p. 242, 293. Here is a manifest error, the number of days greatly exceeding the number of years. By a very ingenious correction, Mr. *Davis* found out that this was exactly the number of days elapsed of the *Calpa*, or from the Creation to the Flood, and only from the Flood to the *Hejira* 3725 years. *Asiat. Research.* Vol. IX. p. 579, 671. Subtracting, therefore, the date of the *Hejira*, A.D. 622, there remains B.C. 3103 for the date of the Deluge.

And this correction is verified by the *Persian* Chronology; for, according to *George* of *Trebizonde*, the Persians reckoned from the Deluge to the Era of *Jesdejird*, A.D. 632, (ten years after the *Hejira)* 3735 years, 10 months, and 23 days; which gives precisely the same date of the Deluge, B.C. 3103, current, or B.C. 3102, complete; but this is the date of the *Cali yuga*, consequently, the *Cali yuga* denoted the Deluge. *Asiat. Research.* IX. 673. This is further proved from the *Cumarica Chanda*, which states, that "after three thousand and one hundred years of the *Cali yuga* shall be expired, king *Saka*, or *Salivahana* *, will appear to remove wretchedness from the world." This was to be a divine child, born of a virgin, and the son of the great *Tacshaka*, or "carpenter." See *Wilford's* Essay on the Kings of *Magodha*, p. 435. *Asiat. Research.* Vol. IX.

But though the date of the Astronomical Era, *Cali yuga*, be invariably fixed to B.C. 3102, the Historical Era of that name fluctuates considerably.

The *Bhagavat* reckons it................ B.C.	1913
The *Vishnu Purana*..........................	1905
Other *Puranas*	1370
The followers of *Jina*	1078

* Captain *Wilford* traces a resemblance in *Salivahana* to *Sala*, or *Shiloh*, in Jacob's prophecy. *Asiat. Research.* Vol. VIII. p. 601.

This discordancy of dates is sufficiently accounted for by *Wilford*, in the following discouraging survey of the present state of *Hindu Chronology*.

"In all their chronological lists, the compilers and revisers seem to have had no other object in view but to adjust a certain number of *epochs*. This being once effected, the intermediate spaces are filled up with the names of kings not to be found any where else, and most probably fanciful. Otherwise, they leave out the names of those kings of whom nothing is recorded, and attribute the years of their reigns to some among them better known, or of greater fame. They often do not scruple to transpose some of these kings, and even whole dynasties; either in consequence of some pre-conceived opinion, or owing to their mistaking one famous king for another of the same name. It was not uncommon for ancient writers to pass from a remote ancestor to a remote descendant, or from a remote predecessor to a remote successor, by leaving out the intermediate generations or successions. In this manner, the lists of the ancient kings of *Persia*, both by oriental writers and others in the west, have been compiled: and some instances of this nature might be produced from SCRIPTURE.—Through their emendations and corrections, you see a total want of *historical* knowledge and criticism; and sometimes some *disingenuity* is but too obvious." *Wilford's* Essay on *Vicra Maditya*, &c. p. 469, quarto.

Indeed the gross imposition practised on Captain *Wilford*, and *Sir William Jones*, in the supposed *Sanscrit* account of *Noah* and his three sons, under the names of *Satyavarnam*, *Sherma*, *Charma*, and *Jyapeti;* forged in the *Padma Puran*, and translated by *Sir William Jones; Asiat. Research.* Vol. iii. p. 67, 262, octavo, are abundantly sufficient to justify the charge of disingenuousness, in the modern *Pundits*, or interpreters.

Besides the *Cali yuga*, there are two other principal Eras in use among the *Hindus:* namely, the *Sombot*, or Era of *Vicra maditya*, B.C. 56; and the *Sakabdo*, from the death of Rajah *Soko*, or *Saka*, A.D. 79. These are collected from ancient records and monuments. Thus, there is a royal grant of land, on a copper plate, found among the ruins of *Mongeer*, dated in the 33d *Sombot*, B.C. 23. *Asiat. Research.* Vol. i. p. 123: another, in the Era of *Vicra maditya*, 1005, or B.C. 1061, p. 287: a third, in the year 123, or 1230, of the same Era, A.D. 67, or A.D. 1174, p. 379: a fourth, in the year of King *Saka*, 939, or A.D. 1018, p. 357.

CHINESE ERAS.

Martinius, a learned Jesuit, who resided many years in *China*, says, in his history, that the Chinese writers dated the Deluge about 3000 years before the Christian Era. Sinens. Hist. lib. 1, p. 12. This nearly accords with the *Cali yug*, or Hindu date, B.C. 3102.

Great uncertainty prevails respecting the origin and first period of the Chinese empire. None of the ancient annals exist, a few fragments excepted; they perished by a singular calamity: the Emperor *Hoangti*, B.C. 213, like *Nabonassar*, the King of Babylon, in an earlier age, ambitious of being reputed by posterity the founder of the Empire, ordered all the books, medals, inscriptions, coins, and monuments of antiquity, to be destroyed, that there might remain no earlier record, date, or authority relative to religion, science, and politics, than those of his own reign. Hence, their most authentic history, composed from the relics of their ancient books, by *Sse-ma-tsien*, about a century before Christ, marked neither the dates nor the durations of reigns, or of dynasties, until B.C. 878. And in the Memoirs concerning the History, Arts, &c. of the *Chinese*, extracted from the Grand Annals, and lately published by the Missionaries of *Pekin*, it is asserted, that all the relations or events prior to the reign of *Yao*, or *Yau*, (as differently pronounced by different writers) which they date, B.C. 2057, "are fabulous, composed in modern times, unsupported by authentic records, and full of contradictions. And that neither the *Chou-king*, or *Xu-king*, their most ancient and authentic record, nor the books of *Confucius*, (who died B.C. 479) or of his disciples, make mention of any genealogies, or princes, before *Yao*. It is also proved, that the origin of the *Chinese* Empire cannot be placed higher than one or two generations before *Yao*."

This is confirmed by the discordancy of the dates assigned to his reign by different writers: *Duhalde* asserts, from the most approved Chinese historians, that *Yao* began to reign B.C. 2357; *Martinius* and *Couplet*, B.C. 2159: *Freret* observes, that nothing certain was recorded in the Chinese Annals previous to the reign of *Yao*, who flourished B.C. 2325, or B.C. 2307. The latest accounts, we see, reduce it to B.C. 2057, three hundred years lower than the first.

But the first date of *Duhalde*, which differs not much from those of *Freret*, seems to be preferable, from an ancient inscription in Chinese letters, upon a plate of marble, and preserved in the temple of a Jewish colony, who settled in *China*, A.D. 73, three years after the destruction of *Jerusalem*, by *Titus;* and have still a settlement at *Cai fong-fou*, the capital city of the province of *Honan*, about 150 leagues from *Pekin*. They came originally from *Persia*, through *Chorasan* and *Samarkand*, from commercial views, and at first amounted to 70 families, of the tribes of *Benjamin*, *Levi*, *Judah*, &c.; but were reduced to seven families, when they were visited by the learned Jesuits, *Gozani*, *Comurge*, and *Gaubil*, A.D. 1720, who published their accounts of this singular colony, in *Lettres Edifiantes*, &c. Tom. VII.; from which a curious extract is given by *Brotier*, in the notes of his excellent edition of *Tacitus*, Tom. III. p. 567, &c.

This inscription, which was made by a literary Jew, named *King-tchong*, A.D. 1444, is as follows:

" The author of the law of *Israel (Y-se-lo-ye)* is *Abraham (Ha-vou-lo-han)*, the nineteenth from *Adam (Ha-tan)*. That holy man lived 146 years before the beginning of *Tcheou*. His law was transmitted by tradition to *Moses (Nieche)*. He received his book on mount *Sinai (Si-na):* there he fasted forty days and forty nights. He was always conversant with Heaven. In his book are fifty-three sections."——It adds, that " *Moses* lived 613 years after the beginning of *Tcheou*." P. 575, 576.

This Era of *Tcheou* did not commence with the first prince of the dynasty of that name, whose reign began B.C. 1122; for *Abraham* certainly was much earlier. It derived its name from a celebrated division of the Empire into twelve *Tcheou*, or provinces; made by the Emperor *Yao*, in the eightieth year of his reign, (B.C. 2357—80=) B.C. 2277. According to *Gaubil's* computation. This would bring the birth of *Abraham* to (B.C. 2277—146=) B.C. 2131; which differs only 22 years from the rectified era of his birth, B.C. 2153. And the birth of *Moses* to (B.C. 2277—613=) B.C. 1664; which differs only 64 years from the rectified era thereof, B.C. 1728. And if, as *Brotier* suspects, the time of *Moses* was reckoned not from his birth, but from his mission to his brethren, 40 years after, B.C. 1688; it would reduce the difference of the Chinese account, to 24 years. This near coincidence of Sacred and Chinese Chronology, is extremely curious, and tends to confirm both. We are therefore

warranted to date the commencement of the Chinese Empire, with the reign of *Yao*, about 22 years higher, B.C. 2379, or about 235 years after the division of the earth, or its colonization by the families of Noah's sons, B.C. 2614, according to our rectified Era; which is not improbable.

The reduction of the era of *Yao's* reign 300 years lower, by the last Missionaries, was designed, most probably, to reconcile the Chinese with the curtailed Jewish Chronology in Europe; or with the Chronology of *Petavius*, founded thereon, and established in the Church of Rome: for thus, the reduced birth of *Abraham*, B.C. 1831, would differ only 19 years from the vulgar Jewish date, B.C. 1812; and the mission of *Moses*, B.C. 1388, would differ 36 years from the vulgar Jewish date, B.C. 1352; and near a century more, from the dates of *Petavius*.

The boasted eclipse of the Sun, in the reign of the fourth Emperor of the first dynasty, founded by *Yao*, *Chong-kang*, upon which the advocates of the early *scientific* attainments of the *Chinese* lay so great a stress; and among the rest, the over-fanciful *Jackson*, Vol. II. p. 424, is thus recorded in the *Chou King:*

"On the first day of the moon, in the reign of *Chong Kang*, and at the autumnal equinox, there was an eclipse of the sun at eight o'clock in the morning, in the constellation *Fang*, (which belongs to the forehead of *Scorpio)* and *Hi* and *Ho*, (who presided in the tribunal of Astronomy) pretended they knew nothing at all of it. They were plunged in wine and debauchery, paying no regard to ancient customs, and entirely forgetful of their duty:" which was to observe and record this eclipse in the Calendar. And for this neglect they were put to death.

This account is so vague, that nothing certain can be collected from it. *Ko*, a learned Chinese writer, in a work recently published on the Chinese Antiquities, has remarked, that "neither the date of the year, not its quantity, are mentioned." Accordingly, Astronomers have differed widely in regard to the year in which it happened: it has been referred to the several years, B.C. 2885, 2159, 2155, 2137, 2007, and 1948.

Jackson has pitched on the third year, B.C. 2155; in which, says he, "Father *Gaubil* found this Eclipse to have happened on the eleventh day of October, in the sign and at the hour set down in the *Chinese* Annals: but that, however, it was so small, as not to be quite *one digit* in quantity at *Pekin*, just after sun rising; and by consequence, lasted not very many minutes in

China. *This* (says he) *is a very remarkable attestation to the truth of the ancient Chinese Annals.* P. 425.

In the same breath, however, *Jackson* remarks, and naturally enough, " But then, if the Eclipse was really *so small* and *so short*, it is not to be wondered that the two Astronomers, *Hi* and *Ho*, should not have observed it: nor could any others hardly be supposed to have seen it."

Rejecting, therefore, this Eclipse, which " *Whiston* found to have been over in *China*, above an hour *before* sun-rising ;" and therefore absolutely invisible to *Hi*, *Ho*, or any one else ; *Jackson* stumbles on the next, B.C. 2137, Oct. 22, about three digits, seen at *Pekin*, the middle of which was about sun-set, or half an hour after five in the afternoon, according to *Whiston's* calculation. And " this," *Jackson* pronounces, " is *probably*, if not *certainly*, the true Eclipse mentioned in the Chinese Annals of *Xu-king*." P. 426.——Though it violates all the conditions !—At all events, *Jackson* was predetermined to have an Eclipse, right or wrong. And on this infallible Eclipse, he proceeds to rectify the whole Chinese Chronology ! P. 427, &c.

The fact seems to be, that the Eclipse, (if there was any such) was interpolated in the Annals long after, to enhance the antiquity of the nation.

The same will hold of another boasted astronomical calculation, found also in the same Annals ; that " *Tchien-hio* knew by calculation, that in one of the years of his reign, there would be a conjunction of the planets, observable in the constellation *Che*, (nearly corresponding to *Pisces* :) in consequence of which, he chose that year to be the first in his Calendar, and made it commence at the new moon of the Vernal Equinox." *Playfair*, p. 78.

But *Gaubil* informs us, that the most credible *Chinese* historians consider this conjunction as fictitious, and omit it in their works: while the *European* Astronomers have wearied themselves to find it out, in the years B.C. 2513, 2461, 2449, 2012.

But the fullest refutation of these supposed early astronomical calculations in *China*, is furnished by the acknowledged time when *Eclipses* began to be regularly recorded in their Annals ; when they began to calculate Eclipses. In the year B.C. 776, which was the beginning of the Olympic Era, an Eclipse of the Sun, in the 6th year of *Yeou-vang*, is noticed in their histories ; which, according to *Couplet's* calculation, happened about 11 o'clock in the morning of Sept. 6 ; and was about 4 digits.

Another, in the 51st year of *Ping-vang*, as computed backward by *Gaubil*, happened B.C. 720, Feb. 22, about 10 in the morning, and was about 8 digits.

It is remarkable, that at the ensuing full moon, after this solar Eclipse, observed in *China*, happened that Eclipse of the moon, recorded by the *Chaldeans*, in the second year of *Mardok Empad*, N.E. 28, in the same year, B.C. 720. These two Eclipses mutually verify each other. *Jackson*, Vol. ii. p. 480.

It was not till the middle of the fifth century before Christ, that *Comets* began to be noticed in the history of *Sema-kouang*, and that very imperfectly, for several centuries after.

Is it to be imagined then, that they were able to compute an eclipse of the sun, and the conjunction of five planets, in times of such remote antiquity as pretended? Or if they were, how is the omission of all the intermediate Eclipses, in so long an interval, to be accounted for*?"

THE PRIMITIVE SPHERE.

Astronomy seems to have been cultivated in the earliest times, on account of its great and various utility. To discover the courses, or revolutions, of the sun and moon, which were originally "ordained for *signs* and for *seasons*, and for *days* and for *years*," was necessary for an accurate knowledge of these several measures of time and of the vicissitude of seasons; so important in *History*, *Agriculture*, *Navigation*, and the due celebration of stated *religious* festivals.

The fixed stars therefore first noticed with attention, were probably those which lay nearest to the sun and moon in their paths through the heavens; because, by observation of their relative positions and distances from such stars, the length of the *Month* and of the *Year* could only be determined. Hence, the first part of the Primitive Sphere that was framed, was naturally the *Zodiac*.

The earliest classification of the *zodiacal* stars, was probably into distinct groups or clusters, formed by connecting lines: such as were found on the most ancient Planispheres, among the *Chinese*; according to *Goguet*, Vol. ii. p. 403. And the *names* assigned to them, were probably at first significant only of their

* The cycle of *sixty* years, employed certainly at an early period by the *Chinese*, on which *Jackson* lays much stress, was entirely of a civil nature, like the *Roman Indiction*, and had no relation to Astronomy.

qualities. Thus, the book of *Job*, the oldest composition extant probably in the whole world; since *Job* himself, who seems to have the best claim to it, was contemporary with *Nahor*, *Abraham's* grandfather, represents the cardinal constellations of spring and autumn, in his time, by *Chimah*, signifying "charming," corresponding to *Taurus;* and *Chesil*, "chilled," corresponding to *Scorpio;* and the cardinal constellations of winter and summer, by *Aish*, signifying "a group," or "assemblage," expressive of *Ursa Major;* and *Mazaroth*, "raging," or "furious," expressive of *Canis*, in the sultry "dog days." As will be proved in the adjustment of *Job's* Chronology.

Of the time when the *animal* constellations, (Ζωδια, whence the *Zodiac* derived its name,) were first introduced, there are no traces preserved in ancient history. They probably were the invention of the *Chaldeans*, to whom the Ancients in general attribute the invention of Astronomy; *Herodotus*, *Cicero*, *Pliny*, &c. And not later, it should seem, than the time of *Nimrod's* death, when that "*mighty hunter* before the Lord" was supposed to be translated to the constellation *Orion*, with his hounds, *Sirius* and *Canicula;* and *the bear*, his principal game among the wild beasts, into *Ursa Major;* according to *Homer*. See the account of *Nimrod*, in the *Assyrian Chronology*.

It is the concurrent opinion of the most eminent Antiquaries, *La Pluche*, *Bryant*, Sir *William Jones*, *Maurice*, *Faber*, *Kett*, *Barret*, &c. that the Primitive Sphere was framed by *Noah's* posterity before the Dispersion; and that from *Chaldæa*, it was propagated to *India*, *Egypt*, and *Greece*. And indeed the general likeness that prevails among the *Zodiacal* constellations in all these countries, both in number and figures, seems strongly to warrant their descent from some common original or prototype.

In the second volume of the *Asiatic Researches*, p. 292, Sir *William Jones* has given the twelve constellations of an ancient *Indian Zodiac*, which are explained in Sanscrit verse, of which he has given the following verbal translation:

"The *Ram*, *Bull*, *Crab*, *Lion*, and *Scorpion*, have the figures of these five animals respectively; the *Pair*, are a *Damsel* playing on a *Vina*, (or Indian Guittar), and a *Youth* wielding a mace; the *Virgin* stands on a boat in water, holding in one hand a lamp, in the other, an ear of rice corn; the *Balance* is held by a weigher, with a weight in one hand; the *Bow* by an archer, whose hinder parts are like those of a horse; the *Sea Monster*

has the face of an antelope; the *Ewer* is a water-pot, borne on the shoulder of a man, who empties it; the *Fishes* are two, with their heads turned to each others tails: and all these are supposed to be in such places as suit their several natures."

The only difference between this and the *Grecian* Zodiac, is in two of the constellations; the *Damsel* and *Youth*, instead of the twins, *Castor* and *Pollux;* and the *Sea Monster*, instead of *Capricorn;* and these probably were the original constellations, which the *Greeks* metamorphosed, according to their usage, not knowing the meaning of these *astronomical* symbols.

The whole *Zodiac* might perhaps have been originally framed by *Noah's* posterity, to record the great leading events in the history of mankind, from the Creation to the Deluge. It is truly remarkable, that four of the constellations, the *Fishes*, *Ram*, *Bull*, and Human *Pair*, exactly express the progress of animal creation, in the first chapter of *Genesis*, ascending from the lowest species, *fish*, to the last and noblest, *Adam* and *Eve;* while the two last, the *Sea Monster* and *Ewer*, bear an obvious analogy to the *Deluge*, in the seventh chapter. The six remaining signs may possibly apply to the intermediate events which brought on the Deluge; but these, being beyond my skill to decypher, I leave to professed Antiquaries.

II. ELEMENTS

OF

HISTORICAL CHRONOLOGY.

TEMPUS EDAX RERUM, TUQUE INVIDIOSA VETUSTAS,
OMNIA DESTRUITIS!————

OVID.

O TIME, *consumer of things, and envious* ANTIQUITY,
Ye all destroy!

II. ELEMENTS

OF

HISTORICAL CHRONOLOGY.

SECTION I.

PRESENT STATE OF HISTORICAL CHRONOLOGY.

ART. I. REVIEW OF EPOCHS, ERAS, AND PERIODS.

HISTORY in general may not improperly be compared to a rich and copious repository, in which are stored, for the example and benefit of posterity, all the various " knowledge of things" and events, of customs and manners, virtues and vices, arts and sciences, which have contributed to the rise and fall of states, to the happiness and misery of mankind, individually and collectively *. But all these precious materials, unless they be arranged in order, and digested according to the times, are no better than a rude and confused mass. Without *Chronology*, History would lose its most valuable characters of *truth* and *consistency*, and scarcely rise above the level of *romance*: for, as it is well observed by an ancient chronologer, *Tatian*:—

Παρ' οἱς ασυναρτητος εστιν ἡ των χρονων αναγραφη,
Παρα τουτοις ουδε τα της ἱστοριας αληθευειν δυναται.

" *With those to whom the computation of the times is unconnected, not even the facts of history can be verified.*"

But *Chronology* itself ought to be correct and accurate:

* Hoc illud est præcipuè in *cognitione rerum* salubre ac frugiferum : *omnis* te *exempli documenta*, in illustri posita monumento, intueri; inde, *tibi tuæque reipublicæ* quod imitere capias; inde, fœdum inceptu, fœdum exitu, quod vites. *Livius* in *præfat.*

otherwise it will fail to discharge properly its important functions, as "the *eye*," and even "the *soul* of *history*;" it will propagate error, and render "confusion worse confounded;" it will form strong holds and fastnesses of *scepticism* and *infidelity:* and some of the most specious weapons, the most mischievous shafts that have been levelled against the veracity and credibility of *Sacred History*, have been supplied from this quarter, to *Voltaire*, *Bailly*, and their associates; and "*those misregulators of time, the Bible Chronologists*," are subjects of the pointed ridicule of that witling, *Paine*.

And *what is the present state of Historical Chronology?*—This we may learn from a competent judge, the celebrated *Joseph Scaliger;* thus complaining of the *variety*, *discordance*, and *imperfection* of *chronological systems:* In multis *judicium*, in quibusdam *diligentiam* requiro; neque enim dum *verum* adepti sunt. Argumento fuerint, *omnium* quotquot de his rebus tractarunt *dissentiones;* ut *inter tot millia chronologorum, vix inter duos de eadem re conveniat!*—Ab eorum lectione *incertior* atque *indoctior* sum quam *dudum* *.

To illustrate the observations and censures of this great *technical* chronologer, I shall first take a pretty extensive review of the surprising diversity of opinions that have prevailed among chronologers, respecting the leading *epochs*, *eras*, and *periods*, by reference to which all historical facts are usually regulated, and arranged in order of time. These are to CHRONOLOGY what the *Cardinal points*, and *prime meridians*, are to ASTRONOMY and GEOGRAPHY; without which it would be impossible to delineate accurately on the celestial and terrestrial globes, the true places and relative positions of *stars*, *planets*, and *comets;* of *countries*, *cities*, *mountains*, and *rivers:* but how carelessly these have been hitherto determined, where the greatest exactness and precision attainable are required, may appear from the variety of opinions respecting them.

In every system of Historical Chronology, sacred and profane, the two grand *eras*, of the *Creation of the World*, and of the *Nativity of Christ*, have been usually adopted as standards, by reference to which all subordinate epochs, eras, and periods, have been adjusted; such as those of *the Deluge*, the *Exode* of the *Israelites* from Egypt, the reign of *Sesostris*, the destruction

* De *Emendatione Temporum*, lib. 1. sub initio, p. 2.

of *Troy*, the overthrow of *Nineveh*, the foundation of *Solomon's* Temple, the foundation of *Rome*, the era of the *Olympiads*, the eclipse of *Thales*, the time of *Cyrus*, &c. But how wide are their variations, may appear from the following lists:

1. *Epochs of the* CREATION.

		B.C.
Alphonsus, King of Castile, A.D. 1252	*Muller*	6984
	Strauchius	6484
Onuphrius Panvinius		6310
Indian Chronology	*Gentil.*	6204
	Arab. records	6174
Babylonian Chronology	*Bailly*	6158
Chinese Chronology	*Bailly*	6157
Diogenes Laertius, B.C. 222	*Playfair*	6138
Egyptian Chronology	*Bailly*	6128
Diodorus Siculus, B.C. 80	*Playfair*	6081
Suidas, A.D. 1090	*Playfair*	6000
Sulpitius Severus, A.D. 420	*Playfair*	5469
Manetho, B.C. 304	*Playfair*	5877
Pezron	*Playfair*	5872
Lactantius, A.D. 306	*Uni. Hist.*	5801
Cary	*Playfair*	5708
Nicephorus, A.D. 758	*Uni. Hist.*	5700
Riccioli	*Playfair*	5634
Clemens Alexandrinus, A.D. 194	*Uni. Hist.*	5624
Fasti Siculi	*Uni. Hist.*	5608
Vossius	*Uni. Hist.*	5598
Septuagint Computation	*Abulfaragi*	5586
Septuagint Alexandrine, used by *Constantinop. Abyssinian*, and *Russian* Churches	*Scaliger*	5508
Persian Chronology	*Bailly*	5507
Cedrenus, A.D. 1060	*Chevreau*	5506
	Strauchius	5493
Maximus Martyr, A.D. 196		5501
Julius Africanus, A.D. 218; *Syncellus*, A.D. 792; *Eutychius*, A.D. 937	*Uni. Hist.*	5500
Chronicle of *Axum* in *Abyssinia*	*Bruce*	5500
Q. Julius Hilarion	*Playfair*	5497
Demetrius, B.C. 220	*Hales*	5487
	Jackson	5444
Eupolemus, B.C. 174	*Jackson*	5443
Jackson		5426
Josephus, A.D. 94	*Playfair*	5555
	Jackson	5481
	Hales	5402
	Uni. Hist.	4698

	Authority	B.C.
Theophilus, B. of *Antioch*, A.D. 168	*Gregory*	5626
	Petavius	5515
	Kennicott	5507
	Abulfaragi	5409
Hales		5411
Indian Computation	*Megasthenes*	5369
Augustin, A.D. 354	*Genebrard*	5351
Talmudists	*PetrusAlliacens.*	5344
Isidore, A.D. 412	*Uni. Hist.*	5336
Albumazar, A.D. 540	*Uni. Hist.*	5328
Rabanus Maurus, A.D. 778	*Uni. Hist.*	5296
Septuagint Vatican		5270
Isidorus Hispalensis, A.D. 304	*Strauchius*	5210
Paulus de Fossembrona	*Uni. Hist.*	5201
Eusebius, A.D. 315	*Uni. Hist.*	5200
Martyrologium Romanum	*Playfair*	5200
Bede, A.D. 673	*Strauchius*	5199
Irish Computation, *Eochodius*, &c.	*O'Conor*	5199
Orosius, A.D. 430	*Uni. Hist.*	5198
Philo Judæus, A.D. 40; *Sigibertus*, A.D. 1100	*Playfair*	5196
Epiphanius, A.D. 368	*Uni. Hist.*	5049
Justin Martyr, A.D. 140; *Metrodorus*, B.C. 170	*Playfair*	5000
Ado, B. of *Vienne*, A.D. 860	*Playfair*	4832
Origen, A.D. 230		4830
Fresnoy	*Uni. Hist.*	4700
Aurelius Cassiodorus, A.D. 463	*Playfair*	4697
Samaritan Computation	*Scaliger*	4427
Seder Olam Sutha	*Ganz*	4359
Odeaton Astrologus	*Playfair*	4320
Samaritan Text	*Uni. Hist.*	4305
Hebrew Text		4161
Jewish Computation	*Abulfaragi*	4220
Marianus Scotus, A.D. 1080	*Uni. Hist.*	4192
Jewish Computation	*Riccioli*	4184
Laurentius Codomannus	*Uni. Hist.*	4141
	Chevreau	4140
Nicholas Vignier		4128
Thomas Lidyat		4103
Ribera	*Uni. Hist.*	4095
Genebrard	*Uni. Hist.*	4090
Arnold de Pontac	*Uni. Hist.*	4088
Chinese Jews	*Brotier*	4079
Michael Mœstlinus	*Uni. Hist.*	4079
Ricciolus	*Uni. Hist.*	4062
Maimonides; *Blancanus*	*Uni. Hist.*	4058

		B.C.
Salianus	*Strauchius*	4053
Labbæus	*Chevreau*	4052
Spondanus, *Torniellus*		4051
Langius	*Strauchius*	4041
	Chevreau	4040
Pererius	*Playfair*	4021
Rheinhold		4020
Playfair, *Walker*		4008
Kennedy, Bedford, Ferguson		4007
Capellus		4005
Usher, Lloyd, Simpson, Spanheim, Calmet, Le Chais, Blair, &c. and *English Bible*		4004
Hevelius, *Marsham*		4000
Kepler	*Playfair*	3993
Petavius		3984
Bibliander	*Uni. Hist.*	3980
Krentzheim	*Uni. Hist.*	3971
Bucholtzer, Matthias	*Strauchius*	3970
Cluverius, Boxhornius, Jansenius	*Chevreau*	3970
Bullinger		3969
Bunting, Bardius	*Playfair*	3967
Longomontanus	*Uni. Hist.*	3966
Melancthon	*Playfair*	3964
Reynoldus	*Uni. Hist.*	3962
Luther		3961
Lightfoot		3960
Salmeron, Picus Mirandula	*Chevreau*	3959
Lamberg	*Strauchius*	3958
Herwart	*Uni. Hist.*	3955
Irish Computation, *Coemhain*, &c.	*O'Conor*	3952
Cornelius a Lapide	*Uni. Hist.*	3951
Scaliger, Isaacson		3950
Strauchius		3949
Johannes Micrelius	*Uni. Hist.*	3948
Helvicus		3947
John Carrion	*Playfair*	3944
Jerom, A.D. 392	*Uni. Hist.*	3941
Gerard Mercator, Beroaldus	*Playfair*	3928
James Gordon	*Playfair*	3880
Arias Montanus	*Uni. Hist.*	3849
Helvigius	*Uni. Hist.*	3836
Some *Talmudists*	*Uni. Hist.*	3784
David Ganz		3761
Vulgar Jewish Computation	*Strauchius*	3760
Rabbi *Gersom*	*Playfair*	3754

		B.C.
Seder Olam Rabba, or "Great Chronicle of the World," A.D. 130	*Ganz*	3751
Rabbi *Habsom*	*Uni. Hist.*	3740
Rabbi *Nosen*	*Uni. Hist.*	3734
Rabbi *Hillel*, A.D. 358		3700
Rabbi *Zacuth*	*Uni. Hist.*	3671
Rabbi *Lipman*	*Uni. Hist.*	3616

Here are upwards of 120 different opinions, and the list might be swelled to 300; as we are told by *Kennedy*, in his Chronology, p. 350. This specimen, however, is abundantly sufficient to shew the disgraceful discordance of chronologers, even in this prime era: the extremes differing from each other, not by *years*, nor by *centuries*, but even by *chiliads;* the first exceeding the last no less than 3268 years!

II. *Epochs of the* Nativity.

	U.C.	B.C.
Tillemont, Mann, Priestly	747	7
Kepler, Capellus, Dodwell, Pagi	748	6
Chrysostom, Petavius, Prideaux, Playfair, Hales	749	5
Sulpitius Severus, Usher	750	4
Irenæus, Tertullian, Clemens Alex. Eusebius, Syncellus, Baronius, Calvisius, Vossius	751	3
Epiphanius, Jerom, Orosius, Bede, Salian, Sigonius, Scaliger	752	2
Chronicon Alexand. Dionysius, Luther, Labbæus	753	1
		A.D.
Herwart	754	1
Paul of *Middleburgh*	755	2
Lydiat	756	3

Here are ten different years, (reckoned by the *era of the foundation of Rome*, and accommodated to the *vulgar Christian era*) which have been respectively adopted by so many celebrated chronologers, ancient and modern. Considering the comparative recency of our Lord's *nativity*, this variety of opinions may naturally appear more extraordinary and surprising than the preceding, which relate to so remote and obscure an event as the *creation of the world.*

The *vulgar Christian era*, commencing with the Julian year, January 1, U.C. 754, according to the *Varronian* computation, though now acknowledged to be incorrect, if referred to the nativity of Christ, (which its inventor, *Dionysius*, mistakenly placed in the preceding year, U.C. 753) is still to be retained as

a long established era, commencing from a known fixed epoch, both forwards and backwards, and furnishing the most convenient standard of comparison for all others.

Vulgaris illa quam tenemus *era* conservanda est, quæ præteritarum rerum memoriam *usu jam inveterata* continet; et *undecunque* ducatur nihil ad *veritatis fidem* interest. *Petavius*, tom. 2. p. 215.

III. *Epochs of the* DELUGE.

	B.C.		B.C.
Septuagint Version	3246	*Playfair*	2352
Jackson	3170	*Usher*, and *English Bible*	2348
Hales	3155	*Marsham*	2344
Josephus	3146	*Petavius*	2329
Persian Computation	3103	*Irish* Computation, *Coemhaim*, &c.	2296
Cali yuga, or *Hindu* Computation	3102	*Strauchius*	2293
Samaritan Text	2998	*Hebrew* Text	2288
Howard	2698	Vulgar *Jewish* Computation	2104

Of these several opinions, selected from a great number, the extremes differ no less than 1142 years. Indeed the variations of this important era, whence the history of the present race of mankind properly begins, are more perplexing and mischievous than those of the Creation itself.

Usher's date, attached to our English Bible, has been relinquished by the ablest chronologers of the present time, from its inconceivableness with the rise of the primitive empires, the *Assyrian*, *Egyptian*, *Indian*, and *Chinese;* all suggesting earlier dates of the Deluge. Hence, the authors of that great and elaborate work, the Ancient *Universal History*, adopted, in preference thereto, the date of the Deluge furnished by the *Samaritan* Hebrew text; and their example has been followed by Captain *Wilford*, in his Remarks on the *Hindu* Chronology, published in the *Asiatic Researches*.

IV. *Epochs of the Exode of the* ISRAELITES *from Egypt*.

	B.C.		B.C.
Josephus, Hales	1648	*Scaliger, Strauchius*	1497
Jackson	1593	*Kennedy*	1495
Playfair	1555	*Usher*, and *English Bible*	1491
Petavius	1531	*Helvicus, Marsham*	1488
Irish Computation, *Coemhaim*, &c.	1502	Vulgar *Jewish* Chronology	1312

The gradual enlargement of this date from the lowest, but earliest, the *Jewish*, to the highest, is remarkable. It shews that succeeding chronologers found the dates of their predecessors insufficient to accord with the range of ancient history.

V. *Epochs of the Reign of* SESOSTRIS.

	B.C.		B.C
Playfair	1555	*Jackson*	1338
Usher	1489	*Hales*	1308
Eusebius	1487	*Newton*	974
Larcher	1356	*Marsham*	967

Here the extremes differ from each other nearly 600 years!

VI. *Epochs of the Destruction of* TROY.

	B.C.
Life of *Homer, Dodwell, Whiston, Freret, Bouhier, Larcher*	1270
Dicæarchus, B.C. 310	1212
Parian Chronicle, B.C. 264	1209 1184
Timæus Siculus, B.C. 270	1193
Democritus, B.C. 362; *Vell. Paterculus*, A.D. 31	1191
Apollodorus, B.C. 115; *Dionys. Halicarnass.* B.C. 5; *Usher, Simpson, Strauchius, Playfair*	1184
Eratosthenes, B.C. 194; *Diodorus Siculus*, B.C. 80; *Eusebius, Lactantius, Syncellus, Scaliger, Hales*	1183
Sosibius	1171
Newton	904

Here the difference of the extremes is 366 years.

VII. *Periods from the Exode of the* ISRAELITES *to the Foundation of* SOLOMON'S *Temple.*

	Y.		Y.
Julius Africanus	741	*Clemens Alexandrinus*	573
Syncellus	659	*Playfair*	540
Paschal Chronicle	632	*Petavius*	519
Josephus, Hales	*621	*Kennedy*	512
Theophilus	612	*Strauchius, Marsham, Houbigant,* and *Hebrew* Text	480
Eusebius, Præp. Evangel.	600	*Eusebius*, Chronicon. *Usher, Lang.*	479
Vossius	591		
Sulpitius Severus	588		
Jackson	579		

* This is the correct date of *Josephus*: there are two spurious dates in his present text, 612, and 592, years.

Here the extremes differ 262 years. And if to this we add the uncertainty attached to the epoch of the Exode, whence this period has been computed, the determination of the true time has been hitherto, as *Houbigant* justly states, *Quæstio chronologica omnium difficillima.*

VIII. *Epochs of the Foundation of* ROME.

	B.C.
Varro, Proclamations of the Emperors, *Augustus*, *Claudius*, &c. The Historians, *Tacitus*, *Plutarch*, *Dion*, *Aulus Gellius*, *Censorinus*, *Onuphrius*, *Baronius*, &c. The Chronologers, *Petavius*, *Beveridge*, *Strauchius*, *Playfair*, &c. *Hales*	753
Cato, *Dionys. Halicarnass.* *Solinus*, *Eusebius*, *Fasti Consulares* of *Ainsworth's* Dict.	752
N.B. *Livy*, *Cicero*, *Pliny*, and *Velleius Paterculus*, fluctuate between the *Varronian* and *Catonian* computations.	
Polybius	751
Fabius Pictor, *Diodorus Siculus*	747
L. Cincius	728
Newton	627

Here the difference of the extremes is 126 years.

IX. *Epochs of the Overthrow of* NINEVEH.

	B.C.		B.C.
Petavius	896 597	*Prideaux*	612
		Newton	609
Strauchius	875	*Eusebius*, *Blair*, *Jackson*, *Playfair*, *Hales*	606
Ctesias	821		
Josephus	710	*Marsham*, *Universal History*	605
Usher	748 626	*Helvicus*	602
		Vignoles	596

Here the extremes differ 300 years. *Petavius* and *Usher*, misled by *Ctesias*, have supposed a double capture of *Nineveh*, the first by *Arbaces*, the second by *Cyaxares* and *Nebuchadonosor*, when it was finally destroyed: differing widely from each other, and from the truth.

X. ECLIPSES *supposed to have been that of* THALES.

The solar eclipse foretold by *Thales*, which put an end to a battle between the *Medes* and *Lydians*, and is of the greatest importance in adjusting the *Median*, *Lydian*, and *Assyrian* chronology, has had the following claimants:

	B.C
Howes	March 5, 618
Calvisius	July 30, 607
Bayer, Mayer, Costard, Stukely, Lalande, Pingré, Montucla, Kennedy, Playfair, Hales	May 17, 603
Usher	Sept. 19, 601
Petavius, Marsham, Hardouin, Bouhier, Larcher	July.. 9, 597
Pliny, Scaliger, Strauchius, Riccioli, Newton, Ferguson, Vignoles, Jackson	May, 28, 585
Scaliger, from *Eudemus*............................	Oct... 1, 583

Here the extreme eclipses differ 35 years.

Such is the wide discordance that prevails among the learned respecting the principal *epochs* and *periods* of ancient chronology, sacred and profane.



ART. II. REVIEW OF THE LEADING SYSTEMS OF CHRONOLOGY.

In this second article, I shall briefly examine and compare the general outline of each system.

I. *Chronology of the* Jews.

The vulgar *Jewish Chronology* is the grand basis upon which the systems of *Scaliger*, *Petavius*, *Usher*, &c. and their followers, have been constructed, though not generally acknowledged by themselves.

What a variety of systems have prevailed among the *Jews* of different countries, and at different times, may appear from the foregoing *dates of the Creation.*

1. The *Seder Olam Sutha*, or "Small Chronicle of the World," published about A.D. 1121, dates the Creation, B.C. 4359. See *David Ganz's* Chronology, p. 135.

2. The *Eastern Jews*, B.C. 4220. See *Abulfaragi*, Hist. Dynast. p. 72.

3. The *Western Jews*, B.C. 4184, according to *Riccioli.*

4. The *Chinese Jews*, B.C. 4079. See a curious account of a *Jewish* colony settled in *China*, since A.D. 73, in the notes of *Brotier's* excellent edition of *Tacitus*, Tom. III. p. 567.

5. The *Vulgar Jewish Era*, B.C. 3760. See *Ganz*, p. 177.

6. *Seder Olam Rabba*, or "the great Chronicle of the World," B.C. 3751. This was the first curtailed system of Jewish chronology, fabricated by Rabbi *Josi*, under the auspices of Rabbi *Akiba*, the abettor of the rebel-impostor *Barchochab*, A.D. 130, in the reign of *Adrian*. See *Ganz*, pref. p. 1. and p. 106.

7. Rabbi *Gersom*, B.C. 3754.

8. Rabbi *Habsom*, B.C. 3740.

9. Rabbi *Nosen*, B.C. 3734.

10. Rabbi *Hillel*, B.C. 3700. He was the author of their ingenious *Technical Chronology*, about A.D. 358.

11. Rabbi *Zacuth*, B.C. 3671.

12. Rabbi *Lipman*, B.C. 3616. He published a work called *Nizachon*, or "a Victory over Christianity," in 1559. This notable champion of Judaism, outstripping all his predecessors in anachronisms and absurdity, (in which the Jewish chronologists abound) fixes the time of Christ's birth in a new and unheard-of way.

He contends, that *Jesus* of *Nazareth* was contemporary with Rabbi *Joshua*, son of *Perechiah*, and that he was born in the fourth year of King *Jannæus*, or *Alexander*, which he dates in the year of the creation, 3615. And to set aside the Jewish tradition, that *Jesus* was born in the days of *Helen*, Queen of *Adiabene*, and of *Herod* the Great, he absurdly supposes that *Helen*, who lived about the year of the Creation 3803, according to *Ganz*, was the wife of the aforesaid *Jannæus*, who lived about 188 years earlier! See *Ganz's* Chronology, p. 270, 271.

The following outline of their vulgar system is collected from *Ganz*.

	Y.		A.M.	B.C.
Adam created	1656		1	3760
Deluge	132		1656	2104
Nimrod reigns	3	292	1788	1972
Babel built	157		1791	1969
Abraham born	48		1948	1812
Confusion of tongues	22	75	1996	1764
Abraham goes to *Charran*	5		2018	1742
———— *Canaan*	25		2023	1737
Isaac born	60		2048	1712
Jacob born	87	425	2108	1652
Levi born	43		2195	1565
Descent to *Egypt*	210		2238	1522
Exode from *Egypt*	480		2448	1312
Temple founded	410		2928	832

	Y.	A.M.	B.C.
Temple burnt	70	3338	422
Second Temple built	40	3408	352
Era of Contracts	312	3448	312
	3760	3760	

The computation of *Ganz*, and of the Jewish chronologers in general, are considerably embarrassed, by their absurd fashion of dropping the chiliads; thus the epoch of the *Deluge* is written contractedly 656, instead of A.M. 1656; *Abraham's* migration to *Charran*, 18, instead of A.M. 2018; the destruction of the *Temple* 338, instead of A.M. 3338; the era of *Contracts*, 448, instead of A.M. 3448, &c.; the chiliads being registered only at the head of each millennium. For ease of comparison, I have reduced the years of the Jewish era of the world, to the vulgar Christian era, in the third column.

The imperfection of the *Jewish Chronology*, may appear from the following considerations:

1. The erection of the powerful empire of *Nimrod*, only 132 years after the Deluge, is at variance with the course of nature in the population of the earth, by *Noah's* sons; when on account of the greater longevity of mankind, the interval of generations, or of the birth of the father before the birth of the son, was proportionably longer. But even at the shortest standard of generations, corresponding to the most reduced period of human life, the earth could not have been sufficiently peopled to account for the extensive conquests attributed to *Nimrod* or *Ninus*, by sacred and profane history: nor can it be supposed that *Noah* and his sons would have permitted such a daring rebellion against *patriarchal* government during their life-time. Besides, *Nimrod* himself could scarcely be born so early, if according to the common interpretation of Gen. x. 8, he was the third in descent from *Noah*, the grandson of *Ham*, and the youngest of the sons of *Cush;* and not at all, if he was, most probably, the fifth in descent, and the contemporary of *Peleg*, by the line of *Shem*, in whose days the division or colonization of the earth took place. Gen. x. 25.

2. By a glaring anachronism, *Abraham*, the tenth in descent from *Shem*, is supposed to be born 48 years before the *confusion of tongues!* and the time assigned for his birth, only 292 years after the Deluge, is utterly irreconcileable with the state of the

world in his days, according to the concurrent testimony of sacred and profane history; for, as judiciously remarked by Sir *Walter Raleigh* long since, "In this patriarch's time all the then parts of the world were peopled; all nations and countries had their kings: *Egypt* had many magnificent cities, and so had *Palestine*, and all the bordering countries; yea, all that part of the world besides, as far as *India:* and these, not built with sticks, but of hewn stone and ramparts; which magnificence needed a parent of more antiquity than those other men have supposed."—"If [then] we advisedly consider the state and countenance of the world, such as it was in *Abraham's* time, yea, *before his birth,* we shall find that it were very ill done, by following opinion without the guide of reason, *to pare the times over deeply between the flood and Abraham: because in cutting them too near the quick, the reputation of the whole story might perchance bleed.*" History, p. 228, 277. An *irrational* chronology is indeed the parent of *Scepticism* and *Infidelity.*

3. The period of 480 years, from the Exode to the foundation of *Solomon's* Temple, is also too short, and is plainly repugnant to the tenor of Scripture, as will appear from the detail of the particulars, collected from *Ganz.*

	Y.	A.M.	B.C.
Exode, under *Moses*	41	2448	1312
Joshua	7	2489	1271
Conquest of *Canaan*	20	2496	1264
Othniel I. Servit. *Mesopotam* .. 8	40	2516	1244
Ehud II. Servit. *Moab* ......18 *Shamgar*	80	2556	1204
Deborah and *Barak* III. Servit. *Canaan*....20	40	2636	1124
Gideon IV. Servit. *Midian*.... 7	40	2676	1084
Abimelech	3	2716	1044
Thola	23	2719	1041
Jair	22	2742	1018
V. Servit. *Ammon* ....(18)	17	2764	996
Jephtha	6	2781	979
Ibzan ....(7)	6	2787	973
Elon	10	2793	967
Abdon	8	2803	957
Sampson	20	2811	949
Eli	40	2831	929
Samuel	11	2871	889

		Y.	A.M.	B.C.
Saul	(40)	2	2882	878
David		40	2884	876
Solomon		4	2924	836
Temple founded		480	2928	832

The Jewish chronologers were hard set to make out this detail, as *Ganz* honestly confesses. For,

1. By a curious invention, they included the first four servitudes in the years of the Judges who put an end to them, contrary to the express declarations of Scripture, representing their administrations not as synchronizing with, but as succeeding the servitudes. Judges ii. 18.

2. They were forced to allow the fifth servitude distinct from the administration of *Jephtha*, because it was too long to be included therein, but they curtailed a year from the Scripture account, 18 years; and they curtailed a year more from *Ibzan's* administration.

3. They sunk entirely the sixth servitude to the *Philistines*, of 40 years, because it was too long to be contained in *Sampson's* administration. And to crown all,

4. They reduced *Saul's* reign of 40 years (Acts xiii. 21.) to two years only! The dishonesty of the whole fabrication could be equalled only by its absurdity; furnishing internal evidence, that the period of 480 years is itself a forgery, foisted into the Hebrew text of 1 Kings vi. 1.

5. The same dishonest management appears in the detail of the next period of 410 years, from the foundation to the destruction of the temple.

		Y.	A. M.	B. C.
Temple founded by *Solomon*		36	2928	832
Rehoboam		17	2964	796
Abiah	(3)	2	2981	779
Asa		41	2983	777
Jehosophat	(25)	23	3024	736
Jehoram		8	3047	713
Ahaziah		1	3055	705
Q. *Athaliah*	(6)	5	3056	704
Jehoash	(40)	39	3061	699
Amaziah	(29)	15	3100	660
Uzziah, or *Azariah*		52	3115	645
Jotham		16	3167	593
Ahaz		16	3183	577

	Y.	A.M.	B.C.
Hezekiah	29	3199	561
Manasseh	55	3228	532
Amon	2	3283	477
Josiah	31	3285	475
Jehoahaz			
Jehoiakim	11	3316	444
Jehoiachin			
Zedekiah	11	3327	433
Temple destroyed	410	3338	422

Here the Jewish Chronology has sunk or suppressed 14 years of the reign of *Amaziah*, two years of *Jehosophat*, and one year each of, *Jehoash* and *Amaziah*, in all 19 years complete, or 20 years current; and this by the confession of their most learned Rabbis, *Abraham ben David*, *Kimchi*, *Levi ben Gerson*, *Isaac*, and the author of *Meor Enaiim*. But what says *Ganz* to their evidence?

"It was not the intention of these learned interpreters *to stir up a controversy concerning the number of the years of the creation which we use at this day;* for we do not find any of them expressing the slightest intention of increasing or diminishing the usual computation of the years of the creation."——"Know, therefore, learned reader, that although the words of our Rabbis, *Kimchi*, &c. and their followers, recommending the addition of 15 or 20 years to our tables of the years of the creation, seem preferable to the words of *Rasi*, who rejected them, yet *we will not recede from the usage of our forefathers;* since '*the law was left unto us and to our children.*' Hence we are necessitated to abide by the computation of *Rasi*, of blessed memory, and to suppose that *Uzziah* reigned 15 years in the life-time of his father." P. 37, 38.

This is a striking and melancholy instance of the force of *prejudice*, even on cultivated minds. And not a few Christian Divines, *Protestant* as well as *Romish*, will, perhaps, at first sight, be disposed to consider the present work as a *mischievous innovation* in Chronology; and be tempted to cry out with the *Jew*—"*We will not recede from the usage of our forefathers.*" See *Kennedy's Chronology*, p. 88.

6. The last supposed period of 40 years, from the finishing of the second temple, in the sixth of *Darius Hystaspes*, B.C. 516, to the *era of contracts*, B.C. 312, was in reality an interval of no

less than 204 years. This is one of the most flagrant violations of chronological truth ever attempted even by the *Jews* themselves. The enormous defalcation of 164 years is passed over in total silence by *Ganz*, though it was impossible that he could have overlooked it. But he quieted his conscience, for this gross imposition upon his readers, by the *orthodoxy* of his system, and its rigid conformity to the *Seder Olam Rabba*, that Jewish standard of *chronological* faith. As he scrupled not to mutilate the *Sacred Chronicles* themselves, so he did not hesitate to curtail the heretical canon of *Ptolomy*.

I have been the more careful in noticing the errors of the *Jewish* Chronology, because it is, in fact, the ground-work of the ensuing systems of *Scaliger*, *Petavius*, *Usher*, &c. as observed before, which are little more than corrections thereof, and because several of the preceding observations are equally applicable to their systems.

II. IRISH *Chronology*.

The Irish *Annalists* and *Bards* paid considerable attention to Chronology. Some of them. *Eochodius*, who flourished in the ninth century, and his followers, the *four Masters*, &c. adopted the Greek computation of the Septuagint Version, and with *Bede*, and the British Church, reckoned 5199 years from the creation to the Christian Era. But others, *Gildas Coemhain*, *Tigerach*, *Flan*, &c. adhered to the shorter Chronology of the Hebrew Masorete text. The system of the latter is contained in the curious and comprehensive Irish poem of *Gildas Coemhain*, containing the annals of the world from the creation to his own time: and he has given a concise and masterly sketch of his system, in the preface of his poem; which has been lately published by that learned Irish scholar, Dr. *O'Conor*, from two ancient Irish MSS. the *Bodleian*, upwards of 500 years old, and another, in the *Stowe* Library, formerly belonging to *O'Flaherty*, in his *Rerum Hibernicarum Scriptores Veteres*, Vol. I. proleg. ii. p. 31, &c. accompanied with a literal Latin translation, and Notes, p. 35, &c.

Gildas Coemhain cecinit.

Annales annalium omnium—*ab initio vitæ primævæ*,
Annunciabunt sequentia hæc—*usque ad tempora ultima.*

1656. *Sex* anni et 50, res perspicua—*mille* supra 600 annos,
Numero, de ætate primarum generationum—*ad diluvium, ab initio mundi.*

292. *Ducenti duo nonaginta* fuere—a diluvio *ad Abrahamum* [natum]:

942. Ab Abrahamo, *nongenti*, noli omittere 42—usque *David* [regem].

473. A David, *ad captivitatem*, non falsa (cano)—73 *quadringenti*:

589. A captivitate ad *Christum*, mansuetum hostiam—89 *quingenti*.

——

3952. *Ter mille* anni, non falsa (cano)—*duo* anni *quinquaginta nongenti*
Ad *nativitatem filii Mariæ*, supra maculam.————
———— Annales a principio initii mundi

1072. *Duo septuaginta* nitidi (perfecti ad unguem) sunt supra *mille* anni
A nato Christo, ad annum hunc, quo—vii lunæ incepit *Januarius*.

5024. *Viginti quatuor* vere mihi,—et *quinque mille* anni,
Usque ad annum hunc, famæ inclytæ—a redacto mundo in formam pulchram.

These annals are thus reduced to the vulgar Christian Era.

	YEARS.	B. C.
Creation	1656	3952
Deluge	292	2296
Abraham born	942	2004
David king	473	1062
Babylonish Captivity	589	589
Christian Era	3952	1

The year in which *Coemhain* wrote his Annals, A.D. 1072, is ascertained by its *Astronomical* character: for the new moon fell on Dec. 25, 1071; and consequently, the 7th day of the month was Jan. 1, 1072, as critically remarked by Dr. *O'Conor*.

This system nearly corresponds with the

III. *Chronology of* SCALIGER.

Joseph Scaliger was the first scholar of his own, or of any age; he was distinguished by the brilliancy of his genius, and the variety and extent of his erudition. His celebrated work, *De*

emendatione temporum, first appeared in 1596, and the last and best edition of it was published in 1629. It contains a copious fund of miscellaneous information, classical, historical, and chronological, intermixed with much that is fanciful. Two of its most curious and valuable parts are the *Prolegomena*, and the *Appendix;* the latter especially, which contains *fragments* from the most ancient Greek writers, *Berosus*, *Abydenus*, *Menander*, *Herodotus*, &c. collected chiefly from *Josephus*, and enriched with his own notes. *Technical chronology* is the professed subject of his work, not *historical;* however, he has incidentally noticed and determined some of the principal epochs of sacred history, and has supplied the following periods in sacred chronology, which are here reduced to the *Julian period*, and to the *vulgar Christian era*. See his *Catholica Temporum*, p. 780.

	YEARS.	J. P.	B. C.
Creation	1656	764	3950
Deluge	292	2420	2294
Abraham	75	2712	2002
——— goes to *Canaan*	430	2787	1927
Exode from *Egypt*	479	3217	1497
Temple founded	428	3696	1018
——— destroyed	59	4124	590
Babylonish Captivity ends	108	4183	531
Second Temple rebuilt	259	4291	423
Dedication by *Judas Maccab.*	164	4550	164

In the first five articles he has closely copied the Jewish Chronology, only inserting five years omitted by the *Jews*, to make up the 430 years from *Abraham's* migration to Canaan unto the Exode, and deducting one year from the 480, between the Exode and foundation of the temple. And he has enlarged the interval from the foundation to the destruction of the temple by 18 years, according to the corrections of *Kimchi*, &c.; but he incorrectly dates the building of the second temple, B.C. 423, which was finished near a century earlier, B.C. 516, though he has therein partly corrected the notoriously curtailed Jewish date thereof.

Concerning *Daniel's* famous prophecy of the 70 weeks, he rightly concluded, with the *Jews*, that it ended with the destruction of *Jerusalem* by *Titus*, A.D. 70; and consequently began, B.C. 420, in the fourth year of *Darius Nothus*, king of *Persia*. Proleg. p. 43.

IV. *Chronology of* PETAVIUS.

Dionysius Petavius, or *Petau*, had all the requisites almost of a consummate chronologer. He was skilled in the learned languages, deeply read in universal history, a master of technical chronology, a good mathematician and astronomer, equal to the calculation of eclipses, and exerted the most laborious, patient, and indefatigable industry of research. By the combination of these talents, he was enabled to detect and expose the errors of his more ingenious, but more fanciful rival, *Joseph Scaliger*, but not to establish his own system. Unfortunately, he bowed down too implicitly to the Church of Rome, and to the *Hebrew verity;* reprobating every departure from, or emendation of, the *Masorete* text; and he pronounced the following anathema against those "who dared to assert, that the number 480 years was corrupt," in 1 Kings vi. 1. *Hæc nimis effrænata grassandi in Scripturam licentia, coercenda et repudianda videtur.* Emend. Temp. lib. viii. cap. 9.

Of course, his system is little more than an improvement on the preceding, as will appear from the following comparative outline:—

	Y.	J.P.	A.M.	B.C.
Adam .... (1656)	1655	730	1	3984
Deluge......................	154	2385	1655	2329
Confusion of Tongues, *Nimrod's* Reign	65	2539	1809	2175
Ninus reigns	74	2604	1874	2110
Abraham	70	2678	1948	2036
——— goes to *Charran*......	5	2748	2018	1968
——— goes to *Canaan*	25	2753	2023	1963
Isaac....................(60)	59	2778	2048	1936
Jacob	87	2837	2107	1877
Levi.......................	43	2924	2194	1790
Descent to Egypt........(215)	216	2967	2237	1747
Exode from Egypt	519	3183	2453	1531
Temple founded..............	423	3702	2972	1012
——— destroyed	69	4125	3395	589
Second Temple	208	4194	3464	520
Era of Contracts	312	4402	3672	312

Here he has enlarged *Scaliger's* epoch of the creation by 34 years. He reckons the 480 current, or 479 complete years, from the *end* of the Exode, which adds 40 years to the period, from

the Exode itself; and fully correcting the mistakes of his predecessors, he dates the rebuilding of the second temple from the second year of *Darius Hystaspes*, B.C 520, when the work was resumed, and afterwards finished in the sixth year of his reign.

His *Chronological Series* of Events from the Creation, B.C. 3983, to A.D. 533, is the fullest I have seen, and deserves to be republished separately for general use. It is in the 13th book, tom. 2, pp. 282—490.

V. *Chronology of* USHER.

This early-ripe, profound, and various scholar, *James Usher*, was one of the brightest luminaries of the Church of IRELAND, in which he rose by his transcendent merits to the highest dignity of Archbishop of *Armagh*, and Primate of all *Ireland*. He was a great encourager, and munificent patron, of literature in general, and of Oriental in particular. His collection of Oriental MSS., purchased at a great expence in all parts of the world, is highly valuable; and to him principally we owe the publication of the *Samaritan* Pentateuch, which first began to lessen the superstitious attachment of the learned to the *Hebrew verity*, as it was called, or the supposed immaculate purity of the *Masorete* Hebrew text. But though his own private opinion always was, that the Hebrew copies of the *Old Testament* were no less liable to the errors of transcribers, than those of the *New Testament*, and of *all other books* *, yet he scrupled to incur the charge of innovation. Hence his system is little more than a correction of the preceding; to which it is superior in some points, though inferior in others, as will appear from the following comparative outline:—

	Y.	J.P.	A.M.	B.C.
Adam	1656	710	1	4004†
Deluge	101	2366	1656	2348
Confusion of Tongues	13	2467	1757	2247

* Ad me quod attinet, sententia mea hæc perpetuo fuit, Hebræum *Veteris* T. codicem scribarum erroribus non minus esse obnoxium quam *Novi* codicem, et *libros alios omnes*. *De Sept. Versione* Syntagm. p. 219.

† The year B.C. 4004, was a remarkable astronomical epoch, when the great axis of the earth's orbit coincided with the line of the equinoxes; and consequently the true and mean equinoxes were united. This curious discovery was announced by the great French astronomer, *La Place*, in his *Méchanique Céleste*, Tom. III. p. 113.

	Y.	J.P.	A.M.	B.C.
Nimrod's Reign	108	2480	1771*	2234
Terah	130	2588	1878	2126
Abraham	74	2718	2008	1996
——— goes to *Charran*	1	2792	2083*	1922
——— goes to *Canaan*	25	2793	2084*	1921
Isaac	60	2818	2108	1896
Jacob	80	2878	2168	1836
Levi	50	2958	2248	1756
Descent into *Egypt*	215	3008	2298	1706
Exode from *Egypt*	479	3223	2513	1491
Temple founded	424	3702	2992	1012
——— destroyed	69	4126	3396	588
Second Temple built	207	4195	3465	519
Era of Contracts	312	4402	3672	312

From this it appears, that the Chronology of *Usher* is 20 years longer than that of *Petavius;* and it is remarkable, that throughout the whole outlines, they only agree in two dates, namely, the foundation of the Temple, B.C. 1012, and the Era of Contracts, B.C. 312.

The principal improvement of *Usher's* system is in the age of *Terah*, 130 years at the birth of *Abraham*, in which he happily rectified the vulgar error, that *Abraham* was born in the 70th year of his father's age, because he is named the first of his sons, "And *Terah* lived 70 years, and begat *Abraham*, *Nahor*, and *Haran*." Gen. xi. 26. But *Abraham* was probably the youngest son, and *Haran* certainly the eldest; because *Haran's* two daughters, *Milcah*, and *Iscah*, the latter surnamed *Sarai*, afterwards *Sarah* †, were married to their uncles, *Nahor* and *Abraham*, respectively. Gen. xi. 29. And *Sarah* was only 10 years younger than *Abraham*. Compare Gen. xvii. 15—17.

Abraham was the son of *Terah* by a second wife. This ap pears from his apology to *Abimelech*, for his equivocation in calling *Sarah* his sister, "She is the daughter (grand-daughter) of my father, but not the daughter of my mother." Gen. xx. 12. By the same latitude of expression, *Abraham* called his nephew *Lot* "his brother." Gen. xiv. 14. And OUR LORD called his

* These numbers in the series A.M. (or *years of the world*) are incorrect; they ought each to be a year less, viz. 1770, 2082, 2083. Hence, computations made by this series will frequently differ a year or two from those made by the series B.C. or the years before the *vulgar Christian era*, which puzzled me for some time before I discovered the cause. The series B.C. is more correct, and should be used in preference.

† *Sarai* signifies "my princess;" *Sarah*, "the princess."

cousin-germans "his brothers and his sisters." Matt. xiii. 55, 56.

And that *Abraham* was born in his father's 130th year, is evident from the age of *Terah*, at his death, 205 years. Gen. xi. 32. At which time *Abraham* was 75 years old. Gen. xii. 4. But 205—75=130.

Abraham was named the first of *Terah's* sons, "not from primogeniture, but from pre-eminence," as the *father of the faithful*, and the illustrious ancestor of the *Israelites*, and of the *Jews*, whose "seed was CHRIST," according to the flesh; with whose history the Old Testament properly commences: "Now these are the generations of *Terah*," &c. Gen. xi. 27. All the preceding part of *Genesis* being only introductory thereto. By the same analogy, *Shem*, the second son of *Noah*, is placed first of his three sons, Gen. v. 32, and *Japheth*, "the eldest," last. Compare Gen. x. 21, and xi. 20. Thus *Isaac* is put before *Ishmael*, though 14 years younger. 1 Chron. i. 28. And *Solomon*, the eldest, is reckoned the last of *Bathsheba's* children. 1 Chron. iii. 5 *.

Although this addition of 60 years to the age of *Terah*, at *Abraham's* birth, was one of the most brilliant and important of Primate *Usher's* improvements in Chronology, yet it was perhaps injurious to his whole system. Not venturing, it seems, to recede too far from the prevailing systems, in fixing the age of the world, he injudiciously abridged the times before and after *Abraham* too much; for,

1. He reduces the commencement of *Nimrod's* reign still lower than his predecessors, to only 114 years after the deluge.

2. He reduces *Abraham's* sojournment at *Charran* to only one year. Even the five years allowed by the *Jews* and *Petavius* are short of the truth, 15 years; as will be proved hereafter.

3. He retains the spurious period of 480 years, which *Peta-*

* This argument is well stated by *Marsham*, who judiciously adopted the rectification of *Usher*.

Vixit pater (*Terah*) annos 205: *post mortem patris, Abraham* agebat annum ætatis 75: non itaque nasci potuit ante annum patris 130. Qui aliter sentiunt acriter urgent, '*Tharam vixisse annos 70, et genuisse Abraham, Nahor, Haran.*' (Gen. xi. 26.) Non autem inde constat, omnes natos isto anno, non omnes eo ordine: Abraham ibi *prærogativâ, non primogeniturâ, primus*. Sic numerantur filii Abraham, '*Isaac* et *Ismael*.' (I Chron. i. 28.) At *Ismael* natus anno patris 86, *Isaac* 100. Sic inter *Noe* filios, *Shem* aliquoties primus nominatur. (Gen. v. 22.) At in recensendis genealogiis, secundum ordinem naturæ, tam *Japhet* quam *Ismael* primum locum obtinent. (1 Chron. i. 5—29.)

vius had enlarged to 520 current years, or 519 complete; and thereby renders his system, from *Abraham's* migration to *Canaan* downwards, still more defective than that of *Petavius*. The true period is 621 years, as will be proved in the rectification of the Chronology of *Josephus*.

4. His date of the destruction of the temple, B.C. 588, and *Petavius's*, B.C. 589, are both incorrect; it should be B.C. 586, as judiciously determined by *Jackson*, from *Ptolomy's Canon*.

The system of *Usher* has prevailed principally in the *British* empire, and among the divines of the *Reformed Church* on the continent of *Europe;* that of *Petavius* among the divines of the Church of *Rome*. The dates of *Usher* chiefly have been annexed to the last translation of the Bible, and established by public authority; but the system itself being radically defective, these dates must necessarily be erroneous, and therefore ought to be rectified, as furnishing a plausible ground of impeaching the veracity and credibility of Holy Writ to sceptics and infidels.

VI. *Chronology of* MARSHAM.

The very learned and acute chronologer, Sir *John Marsham*, has ingeniously, though unsuccessfully, attempted to reconcile the leading events of sacred and profane Chronology together, by a comparative view of the *Egyptian*, *Hebrew*, *Phœnician*, *Grecian*, &c. antiquities and chronicles. In the beginning of his *Chronicon*, p. 12. edit. 2. Leipsic, he has given a cursory outline of the *Hebrew* Chronology, from the Creation to the end of the *Babylonish* Captivity, steering his course between *Petavius* and *Usher*.

	Y.	J.P.	B.C.
The Creation	1656	714	4000
Deluge	426	2370	2344
Abraham goes to *Canaan*	430	2796	1918
Exode from *Egypt*	480	3226	1488
Temple founded	400	3706	1008
——— destroyed	70	4106	608
End of the Captivity in the first of *Cyrus*	538	4176	538

In reckoning 426 years from the Deluge to *Abraham's* migration to *Canaan*, he assigns 291 years to the birth of *Haran*, the eldest of *Terah's* sons, 60 years more to the birth of *Abraham*, and 75 years to his arrival in *Canaan*; but he reduces even lower than the *Jews* the interval 400 years, from the foundation

to the destruction of the temple. From such a defective standard, then, the failure of his plan was naturally to be expected. The principal error which embarrassed his whole scheme of profane Chronology, was the adoption of the mistake of *Josephus*, that the famous *Sesostris*, king of Egypt, was the *Shishac* or *Sesac* of Scripture, who invaded *Rehoboam*, and plundered the temple of Jerusalem; and this, unfortunately, misled Sir *Isaac Newton* also.

VII. *Chronology of* NEWTON *.

This illustrious philosopher, who had laboured so successfully in his youth to improve *experimental philosophy* and *mathematics*, in his immortal *Principia*, *Optics*, *Arithmetica Universalis*, and *Fluxions*, devoted his latter days to the arduous study of *Chronology*, in which, according to the account he gave himself, about five months before his death, to his friend Dr. *Pearce*, late Bishop of Rochester:—"He had spent 30 years, at intervals, in reading over all the authors, or parts of authors, which could

* The author of this Review has long studied and admired the *philosophical* and *mathematical* writings of *Newton*, and has laboured to explain and vindicate them in various publications.

1. *Sonorum Doctrina*, &c. 1778, 4to. Dublin. Designed to explain and illustrate *Newton's* most abstruse and difficult *Theory of Sounds*, and to vindicate the demonstration of its fundamental proposition; *Princip.* Lib. 2. Prop. 47.

2. *Dissertatio de Motibus Planetarum in orbibus excentricis*, 1782, 8vo. Dublin. Designed to unfold Newton's *Planetary and Cometary System*, by a critical explanation of the Corollaries of *Princip.* Lib. 1, Prop. 16, from which it is derived.

3. *Analysis Æquationum*, 1784, 4to. Dublin. Composed principally as a comment on Newton's *Arithmetica Universalis*. In this, his celebrated *Binomial Theorem* is accurately demonstrated; and his method of finding the roots of æquations by approximation is vindicated, against the censure of *De la Grange*.

4. *Analysis Fluxionum*, 1800, 4to. London. An attempt to investigate and explain the genuine principles of *Fluxions*, from *Newton's* very concise account, *Princip.* Lib. 2, Lem. 2, and from his doctrine of *Limits*, or of *prime and ultimate* ratios, briefly delivered in the first section of the first book, to establish the demonstration of his elementary proposition, *the fluxion of a rectangle*, and expose the mistakes of *Maclaurin*, &c.; to vindicate his claim to originality of invention against the advocates of *Leibnitz*, &c.; and to repel the charge of Materialism, brought against him by Professor *Robinson*, from his theory of pulses or vibrations, &c.

It was not therefore without considerable reluctance that he could bring himself to censure the *posthumous* work of a venerated author; and accordingly, at first, he omitted to review his *Chronology*; but upon re consideration, and revisal of this *Introduction*, he found it indispensably necessary to do so, in order to remove from error the powerful weight of such an imposing authority; and also to vindicate and establish the elementary dates of *Greek*, *Latin*, and *Egyptian* Chronology, which *Newton*, with much perverted ingenuity, had laboured to overthrow, but in vain.

Amicus *Socrates*, amicus *Plato*, sed magis amica VERITAS.

furnish any materials for forming a just account of the subject; that he had in his reading made collections from these authors, and had, at the end of 30 years, composed from thence his *Chronology of Ancient Kingdoms;* and that he had written it over several times (*sixteen* times, as the Bishop collected afterwards from his discourse) making few alterations therein but what were for the sake of shortening it, leaving out, in every later copy, some of the authorities and references on which he had grounded his opinion."

A few days before his death, Bishop *Pearce* visited and dined with him at *Kensington.* "I found him," says he, "writing over his *Chronology of Ancient Kingdoms,* without the help of spectacles, at the greatest distance in the room from the windows, and with a parcel of books on the table, casting a shade upon the paper. Seeing this, on my entering the room, I said, '*Sir, you seem to be writing in a place where you cannot well see.*' His answer was, '*Little light serves me.*' He then told me, that '*he was preparing his Chronology for the press, and that he had written the greatest part of it for that purpose* *.' The work was published in the year after his death, in 1728, by his nephew, Mr. *Conduitt,* who supplied the authorities found in it at present.

The date of the Creation does not occur any where in the course of the work; but from inspection and comparison of the dates in the *short Chronicle* prefixed, from the death of *Eli,* and capture of the Ark by the *Philistines,* to the invasion of *Judea* by *Sesac,* king of Egypt, in the fifth of *Rehoboam,* it is evident, that he preferred the system of *Petavius* before that of *Usher.* His dates are usually four years higher than those of the former; whence we may collect, that his epoch of the Creation was about B.C. 3988, or four years higher than that of *Petavius.*

	Usher.	*Petavius.*	*Newton.*
Death of *Eli* .... B.C.	1117	1096	1100
Saul made King..............	1095	1068	1069
Samuel dies..................		1057	1060
David made King	1055	1055	1059
Solomon reigns	1015	1015	1019
Temple founded..............	1012	1012	1015
Rehoboam reigns..............	975	975	979
Sesac's Invasion..............	971	970	974

* See Bishop *Pearce's* Life, prefixed to his *Commentary on the Gospels,* p. 42—44.

Here *Newton* notices the time of *Samuel's* death, omitted by *Usher;* and he reduces the reign of *Saul* to 10 years, following *Petavius* rather, who made it only 13 years, than *Usher*, who rightly rated it 40 years.

Notwithstanding the extreme ingenuity of its construction, the Chronology of *Newton* is now generally allowed to err in defect, and to fall short of the truth about *three hundred years*, more or less *. The structure, indeed, is elegant, but it is built upon a sandy foundation.

His fundamental error was the supposed identity of *Sesostris*, the great Egyptian conqueror, with *Sesac.*

"This is no new opinion," says he: "*Josephus* discovered it when he affirms that *Herodotus* erred in ascribing the actions of *Sesac* to *Sesostris*, and that the error was only in the name of the king: for this is as much as to say, that the true name of him who did those things described by *Herodotus*, was *Sesac*, and that *Herodotus* erred only in calling him *Sesostris*, or that he was called Sesostris by a corruption of his name. Our great chronologer, Sir *John Marsham*, was also of opinion that *Sesostris* was *Sesac.* And if this be granted, then it is most certain that *Sesostris* came out of *Egypt*, in the fifth year of *Rehoboam*, to invade the nations, and returned back into *Egypt* in the fourteenth year of that king: and that *Danaus*, then flying from his brother [*Sesostris*] came into Greece within a year or two after." P. 70.

But this cannot be granted: for, in the ensuing rectification of *Egyptian* Chronology, it will be shewn: 1. That *Herodotus* did not ascribe to *Sesostris* the actions of *Sesac;* 2. That *Sesostris* returned from his *Indian* expedition about B.C. 1300; and that the *Sesac* who invaded *Rehoboam*, about B.C. 985, more correctly, was probably the *Cephrenus* of *Herodotus*, who was supposed to have built the second of the great pyramids of *Memphis.*

Grecian Chronology.

With the return of *Sesostris* from his Indian expedition, *Newton* has ingeniously and skilfully connected the leading facts of the earlier Grecian history, by a curious chain of *analytical* reasoning, of which this is the result:

* "Illustriss. *Newtoni* hypothesis, *tercentum* totos annos à *veterum Chronologiâ* amputans," &c.—Dissertat. in *Hesiod.* Edit. Robinson, p. xxxii.

(1.) "I have stated the time of the return of the *Heraclides* about 340 years before the battle of *Thermopylæ;* (2.) And made the taking of *Troy* eighty years older than that return, according to *Thucydides;* (3.) And the *Argonautic* expedition, a generation older than the *Trojan* war; (4.) And the wars of *Sesostris* in *Thrace*—a generation older than that expedition." P. 7.

The dates he assigns thereto are the following, compared with the most approved.

	Newton.	*Correct.*	*Difference.*
1. Return of the *Heraclidæ* ...... B.C.	825	1103	278
2. The taking of *Troy*	904	1183*	279
3. *Argonautic* Expedition	937	1225†	288
4. Return of *Sesostris*	965	1300	335

Return of the HERACLIDÆ.

1. To find out this return, *Newton*, following *Herodotus*, counts seventeen double Spartan kings of the two lines of *Eurysthenes* and *Procles*, who were born shortly after the return, to the death of *Leonidas*, the last of the former line, at the battle of *Thermopylæ*, B.C. 480; which counted upwards from thence, and multiplied by 20 years apiece, (his average of the duration of reigns) gives 340 years; and this added to B.C. 480, gives B.C. 820, or about B.C. 825, *(Short Chron.)* for the date of the return of the *Heraclidæ;* 278 years lower than the correct date.

But in this case, 1. His average of the length of reigns is too low; in such an uninterrupted succession, the reigns may be considered as equivalent to generations of three to a century. 2. The particular circumstances of the history also may warrant us to consider these 17 generations as equal in length to 19: For *Aristodemus*, who led back the *Heraclidæ*, died a year or two after their return, and left twin sons, *Eurysthenes* and *Procles*, who jointly succeeded him. Here then was a long minority, which may have made their joint reigns considerably longer than a generation. Afterwards, there was another long minority in the case of *Charilaus*, the seventh in succession from *Procles*, who was proclaimed king as soon as he was born, by his uncle and guardian, the celebrated legislator, *Lycurgus*. *Cleomenes*,

* See Jackson's Dissertation on the time of the *Argonaut* expedition, Vol. III. p. 318—326.

† Ibidem, p. 327—332.

also, the father of *Leonidas*, was advanced in years when his son was born, which lengthened his generation; and *Leonidas* himself was in the decline of life when he was killed*; as appears also from his being contemporary with *Leutychides* the eighth, from the *Messenian* war, by the line of *Procles*. But 19 generations give a term of about 633 years; which differs not much from 623, the correct interval of years between the return of the *Heraclidæ* and the battle of *Thermopylæ*.

And this corresponds very well with the time of the legislation of *Lycurgus*, B.C. 884, according to *Eratosthenes*. For from this to the battle of *Thermopylæ*, B.C. 480, was an interval of 404 years: and from *Charilaus*, the nephew and ward of *Lycurgus*, to *Leutychides*, were eleven kings inclusive. Their reigns may be reckoned equivalent to 12 generations, as observed before; but 404 years, divided by 12, gives $33\frac{2}{3}$ for the mean value of a generation: very near the standard of three generations to a century. See the *Elements of Technical Chronology*.

To support his hypothesis, *Newton* has reduced the time of *Lycurgus* too low; citing *Thucydides*, and *Socrates* in *Plato*, to shew that the institutions of *Lycurgus* were only a little more than 300 years before the end of the Peloponnesian War, in B.C. 404; or about B.C. 708, p. 35, 58. But the Latin version of *Stephen's Thucydides*, 300 years, which he followed, is incorrect; the Greek reads τετρακοσια, 400, which is confirmed by *Duker's* excellent edition, and all the MSS.; and it is strange how *Newton* could either overlook it, or prefer the faulty translation. And this is confirmed by the apposite testimony of *Diodorus Siculus*, who states, that "the *Lacedemonians* were very powerful after they used the laws of *Lycurgus*, for *more* than 400 years; till they fell into luxury and slothfulness, and began to use money and amass wealth." For *Agis* repealed the law of *Lycurgus* against gold and silver money, in his last year, B.C. 400.

Newton's additional arguments to fix the time of *Lycurgus* from *Terpander* the musician, and the *Olympic* disk, are vague and unsatisfactory. See *Jackson*, Vol. III. p. 344.

His last argument to determine the return of the *Heraclidæ*, from the time of *Cypselus*, King of Corinth, is inconsistent: for at first, p. 62, he counts six generations from *Melas*, who lived

* *Musgrave* reckons him 52 years old. See his Vindication of the *Chronology of the Olympiads*, p. 162—166.

at the time of their return, to *Cypselus*, whose reign began B.C. 655. Whence, reckoning these generations at 30 years apiece, he dates the return of the *Heraclidæ* 180+B.C. 655=B.C. 835. But afterwards, p. 139, from *Aletes*, King of Corinth, who reigned at their return, he enumerates eight of his lineal successors, and after them a succession of *Prytanes*, or Annual Archons, about 42 years, until *Cypselus* began his reign. But surely their reigns and jurisdictions exceeded the length of six generations.

The Destruction of TROY.

2. This next cardinal date must necessarily be raised with the foregoing. And both *Eratosthenes* and *Diodorus Siculus* have ascertained it within a year of each other, by different and independent arguments. According to *Clemens Alexandrinus*, the former reckoned 407 years from thence to the *Olympic Era*, B.C. 776, as follows:

	Y.	B. C.
Destruction of Troy	80	1183
Return of the *Heraclidæ*	60	1103
Ionic Migration	159	1043
Legislation of *Lycurgus*	108	884
Era of the *Olympiads*	407	776

Tatian also adopted this interval; which is confirmed by the following independent computation:

	Y.	B. C.
Destruction of Troy	10	1183
Æneas founds *Lavinium*	8	1173
Ascanius reigns	61	1165
Return of the *Heraclidæ*	328	1104
Era of the *Olympiads*	407	776

This curious and valuable coincidence of *Greek* and *Latin* Chronology, establishing both, is furnished by *Petavius*, Vol. II. p. 36, from some ancient Greek Chronologer, whose name he unluckily omits.

Apollodorus, however, and *Eusebius* following him, reckoned this interval 408 years. Both are consistent; the former denoting complete, the latter, current years. This is plainly intimated by the judicious *Diodorus Siculus*, in his date of the destruction of *Troy*, Lib. XIV. cap. 1. He reckons that the dissolution of the *Athenian* government, at the end of the *Peloponnesian* war,

in the 94th Olympiad, when *Cocynas*, of Larissa, was victor in the games, B.C. 404, took place in the 780th year *current* from the destruction of Troy; which gives the date of the latter B.C. 1184; and consequently 779 years complete from B.C. 1183.

ARGONAUTIC *Expedition.*

3. Along with its predecessors, the time of the *Argonautic* expedition requires also to be raised. *Newton*, following *Diodorus Siculus* and *Tatian*, reckons it one generation prior to the destruction of *Troy*, because the sons of *Argonauts* were engaged in the war: but *Herodotus* places it in the second generation before. We are warranted, therefore, to raise the interval from 33 to 42 years.

Newton, to give collateral support to his system from *astronomy*, laboured to confirm his assigned date of the *Argonautic* Expedition by an ingenious but fanciful argument derived from

The Precession of the Equinoxes.

By an elaborate process, p. 81—90, he computes the amount of the precession of the Equinoxes and Solstices from the time of the *Argonautic* expedition to the end of the year 1689, or the beginning of 1690, to have been 36 degrees, 44 minutes of longitude; and by a subsequent correction, reduces it to 36 degrees, 29 minutes: which, turned into time, at the rate of 72 years for each degree of precession, would give 2647 years, in the former instance, and 2627 years in the latter. These years, therefore, counted backwards from A.D. 1690, give the date of the *Argonautic* expedition, B.C. 957; and by the correction, B.C. 937, which is the very year assigned.

Newton, like *Archimedes*, might say, Δος πoυ στω, και τον κοσμον κινησω, "*Give me footing, and I will move the world.*" But here, unfortunately, he wanted *data*. 1. His assumption of the positions of the cardinal points of the ecliptic, in the middles of the constellations of *Aries*, *Cancer*, *Chelæ*, and *Capricorn*, is altogether gratuitous at the time of the *Argonautic* expedition; and can be proved to be false, from the correcter date of it, and the correcter rate of precession, one degree in 71½ years. 2. The primitive celestial sphere was certainly not invented either by *Chiron* or *Musæus*, jointly or separately, for the use of the *Argonauts*, in that expedition; for it was invented long before, by the *Chaldean* astronomers, whence it was

adopted by the *Indians*, and by the *Egyptians* and *Greeks*. See the *Elements of Technical Chronology*.

Nor, 3. did "its asterisms, as *Newton* supposes, relate to the circumstances of the *Argonauts*, their contemporaries, or predecessors;" but probably to the earliest circumstances of patriarchal history; *Argo*, to *Noah's* ark; *Chiron*, to *Noah* himself, with his *altar* and *sacrifice*, after the flood; *Orion* and his dogs, to *Nimrod*, that "mighty hunter;" the great and little *bear*, the *hare*, &c. to his game, &c. And, 4. to crown all, *Canopus*, the principal star in the constellation *Argo*, is only 37 degrees from the south pole, and the greatest part of the constellation lies still nearer to it: the course of their voyage lay between 39 and 45 degrees of north latitude: consequently, if the sphere had been either constructed by, or for the *Argonauts*, the framer would not have given the name of the ship *Argo* to a constellation invisible at *Pagasæ*, whence they set out, and at *Colchis*, whither they came. The southerly position of this constellation, seems rather to indicate the approach of the waters of the deluge from that quarter of the globe, where "*the fountains of the great deep were broken up;*" probably in the vicinity of the south pole, if we may judge from the resting of the ark upon Mount *Ararat*, in *Armenia*, northwards, from the more abrupt and violent disruptions of the coasts of the old and new continents, southwards than northwards; and from the copious fossil remains of southern animals and vegetables, found very far to the northward at the present day. See the *Elements of Sacred Geography*.

In detailing the fabulous accounts of the asterisms, *Newton* appears to have given too much credit to the monstrous fictions of *Grecian* mythology *, under which, however, are frequently disguised, or caricatured, the genuine features of primeval tradition, and sacred history.

His additional astronomical arguments for confirming the assigned date of the *Argonautic* expedition, drawn from the positions of the cardinal points, in the times of *Thales* and *Meton*, (p. 91, 92) are unsatisfactory, because the observations of these early astronomers were coarse, as he himself confesses,

* Mirari licet, egregium hunc philosophum, in *mathematicis* demonstrationibus *δεινοτατον*, sperasse, tam levibus argumentis, ab *anilibus fabulis* petitis, *universam antiquorum chronologiam* se posse subvertere! *Hesiod.* Variorum 1737, Dissert. p. xxxv.

and even so, have not been accurately recorded; the difference between the beginning or end of the same constellation, making a difference of about 2145 years in the calculation. From such observations no accurate conclusions can be drawn.

Hesiod.

His astronomical argument, however, for determining the time of *Hesiod*, and from thence supporting his assumed date of the *Trojan* war, deserves to be considered, because it will be found not only to militate against his system, but even to support the ancient, and to verify the *Parian Chronicle* in this case.

"*Hesiod*," says he, "tells us, that sixty days after the winter solstice, the star *Arcturus* rose just at sunset: and thence it follows, that *Hesiod* flourished about a hundred years after the death of Solomon, (about B.C. 870, *Short Chronicle*) or in the *generation* or *age* next after the *Trojan* war, as *Hesiod* himself declares." P. 93.

The passage to which he alludes is this:

> Ευτ' αν δ' ἑξακοντα μετα τροπας ηελιοιο
> Χειμερι' εκτελεσῃ Ζευς ἡματα, δη ρα τοτ' αστηρ
> Αρκτουρος προλιπων ἱερον ροον Ωκεανοιο
> Πρωτον παμφαινων επιτελλεται ακροκνεφαιος.

> "When *Jove* shall have completed sixty days
> After the winter solstice, then the star
> *Arcturus*, forsaking the ocean's sacred flood,
> First rises *achronically*, all shining."—*Opera et Dies*, v. 564.

Here "the star *Arcturus*" is put, by a usual metonymy, for the whole constellation *Bootes*, of which it is the most conspicuous: this is evident from the word παμφαινων, "*all-shining*," which is inapplicable to a *single star* *, but corresponds with the usual phrases of the ancient astronomers respecting the risings of the *constellations*, either partially or totally; μεσος επιτελλει, ὁλος επιτελλει, &c.; sometimes, with the addition of the words φανερος, εκφανης. And *Homer* also uses αστηρ, (which properly denotes a single "*star*,") in the sense of σημα, a "*sign*," or constellation; applying both to Κυν' Ωριωνος, "*Orion's dog*," or the constellation *Canis*. Ibid. 20. *Plautus*

* A single star has no apparent or sensible diameter, and therefore rises and sets nearly at once.

too applies both *Stella* and *Signum* to *Arcturus*, in his prologue to the *Rudens*.

> "Ita sum, ut videtis, splendens *stella* candida,
> *Signum* quod semper tempore exoritur suo,
> Hìc atque in cœlo: nomen *Arcturo* est mihi."

Virgil likewise applies *sidus* to *Arcturus:*

> "*Arcturi sidera, Hœdorumque* dies servandi."—Georg. 1, 204.

It does not appear from this passage of *Hesiod*, at what *place*, or in what *time*, the observation was originally made; whether at *Ascra*, the poet's residence, in *Bœotia*, or in a higher or lower latitude; whether in his own age, or from more ancient calendars; or whether the true or apparent rising of the constellation is meant: all which circumstances enter into, and materially affect, the result of the calculation.

Let us, however, suppose that the poet speaks of the apparent *Achronycal* rising of the constellation, at his own country, and in his own age.

In the latitude of *Ascra*, about 38 degrees, 30 minutes, and in the year assigned by *Newton*, B.C. 870, which was Bissextile, the apparent Achronycal rising of *Arcturus*, happened at the beginning of February 18, when the sun was in the 21st degree of *Aquarius*, and depressed twelve degrees below the horizon: that is, 50 entire days from the day of the winter solstice that year, including the extremes. But this falls short of the poet's observation of 60 days; which is repeated and verified both by *Eudoxus* and *Democritus*, and therefore is not liable to the suspicion of an error in the text.

Let us next take the year assigned to *Hesiod*, by the *Parian* Chronicle, B.C. 944; or, for the ease of calculation, B.C. 942; which was Bissextile; and, instead of *Arcturus*, take the star which rises last in the constellation *Boötes*, and is a star of the third magnitude, marked *aζ* by *Bayer*, and which therefore is visible at the horizon, when the sun is depressed 14 degrees below it. This star then rose achronycally in the beginning of February 27, or the *sixtieth* day after the day of the winter solstice, including the extremes: a usual mode of computation, of which we find many instances in sacred and profane authors.

This curious calculation, so satisfactorily verifying the *Parian* date of *Hesiod's* time, and refuting *Newton's* abbreviation, was made by a skilful astronomer, Doctor *Joseph Atwell*, and is in-

serted in the learned *Dissertation* prefixed to *Robinson's* excellent Variorum edition of *Hesiod's* works, 1737. Oxon. p. xxvii., &c. See the Editor's preface.

Newton's mistake, in lowering so much the time of *Hesiod* below the received chronology, may be traced to his mistake and misrepresentation of *Hesiod's* celebrated five ages * of the world, 1. The *Golden;* 2. The *Silver;* 3. The *Brazen;* 4. The *Heroic;* and 5. The *Iron:* in his *Opera et Dies.*

"*Hesiod,*" says he, "hath told us himself that he lived in the age next after the wars of *Thebes* and *Troy,* [i. e. the *Iron* age.] And that this age should end when the men *then living* grew hoary, and dropt into the grave: and therefore it was but of an ordinary length." P. 31. And again:

"*Hesiod* himself tells us, that he lived in the *fifth* age, the age next after the taking of *Troy:* and therefore he flourished within 30 or 35 years after it." P. 160. And further:

"*Hesiod,* describing these four ages of the *gods* and *demigods* of Greece, [the *Golden, Silver, Brazen,* and *Heroic* ages] represents them to be *four generations* of men; each of which ended when the men *then living* grew old and dropt into the grave; and tells us, that the *fourth* ended with the wars of *Thebes* and *Troy.*" P. 158.—"The four first ages succeeded the flood of *Deucalion.*" P. 161.—"This flood was succeeded by four *ages* or *generations* of men:—the last of which ended with the *Trojan* war." P. 13.

In these several passages, *Newton* evidently appears to have confounded γενος, the word uniformly used by *Hesiod* in describing these five ages; signifying "a *race,*" (or peculiar cast of men, distinguished from others, by some *physical* or *moral* qualities, as is evident from the context) with γενεα, "a *generation,*" or the men of a single *age;* three of which were equivalent to a century. And this fundamental error has deranged his entire chronology of those ages, and of the early times of *Greece.*

To rescue this curious and important period of ancient chronology from the uncertainty and perplexity under which it has so long laboured, which *Newton,* his predecessors, and successors, have all failed to explain and clear up; however hazardous, and even presumptuous, may be the attempt, at present, respecting a subject so very obscure and intricate, and so much disputed

* *Ovid* reckons only four ages, including the *Heroic* in the *Brazen* age.

by the ablest critics and antiquaries, I will proceed to examine carefully the account given by *Hesiod* himself; and by comparing it with sacred history and primitive tradition, hope to offer at least a more rational and consistent account of *Hesiod's Ages of the World*, than has hitherto appeared, which I will preface in his own language:

Ει δ' εθελεις, ἑτερον τοι εγω λογον εκκορυφωσω
Ευ και επισταμενως· συ δ' ενι φρεσι βαλλεο σῃσιν.
Opera et Dies, v. 106.

HESIOD'S *Ages of the World.*

1. His *Golden Age* bears no relation at all to *Grecian* History. It is evidently an imperfect tradition of the *primeval* times, before and after the fall; including the *paradisaical* state of our first parents, and also the purer state of *Seth's* line, until his descendants, "*the sons of God*," as they were styled in Scripture for their superior piety, about the age of the righteous *Enoch*, the seventh from *Adam*, began to be corrupted by their promiscuous inter-marriages with the fair, but frail, "*daughters of men*" of the apostate *Cainite* race. Gen. vi. 1, 2; iv. 25; Jude 14.

To this period, *Hesiod's* account bears a remarkable analogy: "When *Saturn* reigned, and men lived like *gods*, free from cares, without labour and sorrow, and the infirmities of age; rich in *sheep* *, dear to the happy gods, enjoying the spontaneous *fruits* of the earth in great abundance, and all manner of good things; and dying without pain, as if overcome by sleep. After death they became *demons* (or good angels) and were admitted to the council of *Jove*, and were appointed guardians of mankind. They went to and fro throughout the earth, observing the righteous or unrighteous deeds of men, dispensers of wealth. Such was their *royal* reward." Vers. 108—126.

Josephus also cites *Hesiod* (though no where extant in his present works) among the authors who recorded that the "first men lived a *thousand* years." Ant. i. 3, 9.

2. The *Silver* age seems to have succeeded the general deluge †.

* Μηλοις: I have rendered it "*sheep*," as it is afterwards understood, vers. 163; rather than "*fruits*," with the *Latin* translation, *pomis;* because the *pastoral* state is thereby distinguished from the *agricultural*. Gen. iv. 2.

† The learned and ingenious Mr. *Mitford* supposes that the first two ages preceded

At that time the original standard of longevity ending with *Noah*, was shortened by successive reductions, from 600 years, the age of *Shem*, to 400, 200, &c. years. Still, however, the mean length of generations to the days of *Abraham*, was a *hundred* years and upwards, according to the longer Greek computation of the *Septuagint* and *Josephus*, supported by the *Samaritan* text. This age probably reached from the deluge to the colonization of the earth, in the days of *Peleg*, or fifth from *Shem*. Gen. xi. 1—32.

It seems to be thus described by *Hesiod*:—"This was a race much inferior indeed; like the *Golden*, neither in body nor mind. Still at a *hundred* years of age they were *boys*, bred up with their careful mothers in simplicity at home. But their term of *manhood* was short, and they died early, suffering for their folly, because they could not abstain from injury to each other, and from impiety to the gods, whose lawful and customary sacrifices they would not offer; wherefore *Jove*, in his wrath, removed them, because they gave not due honours to the happy gods." And the following remarkable exception seems to relate to the first and purest patriarchs of this age, "who after their deaths were called *the second happy mortals*, for still *honour* attended even these." V. 140—143.

3. The three ensuing ages seem to have been peculiar, in a great measure, to the region of *Greece*, the poet's country. His description of the *Brazen* Age seems to relate to the early state of *Greece*, during its successive colonizations or settlements, by the various wandering tribes of *Asia*, *Phœnicia*, and *Egypt*;

the Deluge; that the *Golden* age only represented the state of man in *Paradise*, before the fall; and the *Silver*, that which succeeded it. *Hist. Greece*, Vol. I. p. 63, 155.

This cannot be: for *Hesiod's* description of the *Golden* age evidently extended beyond the *paradisaical* state, in which *Adam* and *Eve* had no children; and includes that period in which "men began to *multiply* on the face of the earth." 2. His account of the diminution of the standard of human life in the *Silver* age, does not agree to the *Antediluvian* times, but agrees remarkably well to the patriarchal generations after the Deluge. Besides *Mitford's* hypothesis excludes the righteous *Noah* and his sons from any of the ages; as the three last refer entirely to *Greece*, in his opinion, which seems to be well founded.

Sir *Isaac Newton's* opinion, that the *Golden* and *Silver* ages, or races, relate particularly to *Greece*, as well as the *Brazen*, the *Heroic*, and the *Iron*, he justly rejects, as "wholly unwarranted."

Hesiod, under the preceding fable of the formation of the fair *Pandora*, who with her box of evils deceived *Epimetheus*, when nothing was left behind but *Hope*, (vers. 60—99) seems to have allegorized the history of the creation of *Eve*, of the fall, and of the *hope* of redemption through "*the seed of the woman*."

which was described by *Herodotus*, *Thucydides*, and *Plutarch*, in his life of *Theseus*, to have been a turbulent and insecure state of piracy, rapine, and violence of every kind. Such was the rape of *Io*, the daughter of *Inachus*, king of *Argos*, by some *Phœnician* traders, about B.C. 1745; the rape of *Europa*, daughter of *Agenor*, king of *Tyre*, by some *Greeks*, in reprisal, about B.C. 1600; which formed a precedent for the rape of *Helen* afterwards, by *Alexander*, or *Paris*, of *Troy*. Herod. Lib. I. 1.

These seem to be described by *Hesiod's* " *Brazen* race, in no respect like the *Silver;* robust, warlike, hardy, and rapacious; having *brazen weapons*, and *brazen houses* (probably *armour*) and working with brazen tools, for *iron was not yet discovered.* They perished by each other's hands, and went to the house of *Hades*, *nameless*, (or without renown,")—because they wanted *poets* or *historians*, in those rude and barbarous times, to celebrate their exploits *. Vers. 144, 145.

This age ended with *Deucalion's* flood; for we are told by *Apollodorus*, and by *Proclus*, in their *Scholia*, that " *Jove* sent a flood to destroy the men of the *Brazen* Age." See *Homer*, Iliad. 1, 10. Didym.

This *Deucalion* and his flood, however, are not to be confounded with the former *Deucalion*, or *Noah*, described by *Ovid*, *Lucian*, &c. and the general deluge; though several of the circumstances of the former are injudiciously applied to the latter, by the poets and their scholiasts. *Deucalion* was a proper name in frequent use among the *Greeks*, on account of the celebrity of the first. There are four *Deucalions*, at least, on record: *Noah*, the first; the present *Deucalion*, king of Thessaly; *Deucalion*, son of *Prometheus*, and brother of *Atlas;* and *Deucalion*, the son of *Minos*, an Argonaut, and the father of

* This interpretation of ανωνυμοι, " *nameless*," by which the *Brazen* was distinguished from the *Heroic* Age, is supported by *Horace* in the following marked references :—

> Vixere *fortes ante Agamemnona*
> *Multi:* sed omnes illacrymabiles
> Urgentur, *ignoti*que, longâ
> Nocte; *carent quia vate sacro.*—Od. 4, 9, 25.
>
> Nam fuit *ante Helenam* mulier teterrima belli
> Causa: sed *ignotis perierunt mortibus* illi,
> Quos *Venerem* incertam rapientes, more ferarum,
> Viribus editior cædebat, ut in grege taurus.—Sat. 1, 3, 108.

Idomeneus, who warred at *Troy*. Indeed, the confusion of different persons bearing the same name, is one of the most fruitful sources of error and perplexity in ancient history and chronology.

4. The *Heroic* Age, which succeeded, is represented by *Hesiod* as "A *divine* race, juster and better than the *brazen*; they were called *demigods*. But the two last generations thereof perished in destructive war and direful combat; namely, they who warred at *Thebes* about the sheep of *Œdipus*, [or disputed the succession to his inheritance, such as *Tydeus*, *Capaneus*, &c.] and they who invaded *Troy* by sea in ships, to avenge the rape of *Helen*, [such as their sons, *Diomedes*, *Sthenelus*, &c.] yet these were, after death, translated by *Jove* to the *happy isles*, in the deep [*Atlantic*] ocean. There they pass a quiet life, and the earth produces them annually a triple harvest of pleasant fruits." Vers. 156—174.

This *Heroic* Age, so celebrated by the principal *poets* and *historians* of *Greece*,—*Hesiod*, *Homer*, *Apollonius*, *Æschylus*, *Sophocles*, *Euripides*, &c. *Herodotus*, *Thucydides*, *Xenophon*, *Diodorus Siculus*, &c. included six or seven generations, which Sir *Isaac* has so unmercifully pared away to *four!* For we learn from *Apollodorus*, in his *Scholia* on *Homer*, Iliad. xii. 117, and from *Homer* himself, Iliad. vi. 154—206, combined, that *Deucalion*, king of *Thessaly*, had seven descendants in one line; and from *Proclus*, that he had six by another, from the flood to the end of the Trojan war; namely, *Hellen*, *Æolus*, *Sisyphus*, *Glaucus*, *Bellerophon*, *Hippolochus*, and *Glaucus* II. in the former; and *Hellen*, *Æolus*, *Critheus*, *Pheretes*, *Admetus*, and *Eumelus*, in the latter. It began therefore, with *Deucalion's* flood, in the second year of his reign, B.C. 1548, according to the *Parian Chronicle;* and it ended B.C. 1183.

5. The *Iron* Age followed the destruction of *Troy*, in the course of which *Hesiod* himself lived. He abruptly introduces his account of it by an ardent wish, either "*that he had died before* it began, *or should be born after* its end;" struck with a lively sense of the daily and incessant toils and miseries of life. And he predicts, that *Jove* shall destroy this race likewise, when the natural and moral degeneracy of mankind shall come to the full; "when *men shall grow grey-headed soon after their birth* *, or the term of life shall dwindle to its shortest standard,

* Ευτ' αν γεινομενοι πολιοκροταφοι τελεθωσιν. This expression is similar to that which *Josephus* puts in the mouth of *Abraham*, deploring the shortness of his son *Isaac's*

compared with the original in the Golden Age; when human miseries, and crimes of every kind against God and man shall prevail universally: then shall white-robed *Modesty* and retributive *Justice*, forsaking the world, fly away to heaven, leaving grievous woes to mortals; and of evil there shall be no remedy *." Vers. 174—201.

6. *Hesiod* no where notices expressly a sixth age to succeed the *Iron*, nor that it should be a state of *regeneration*, or revival of the *Golden* Age. Both these circumstances, however, are strongly implied in the wish itself:—

> Μηκετ' επειτ' ωφειλον εγω πεμπτοισι μετειναι
> Ανδρασιν, αλλ' η προσθε θανειν, η επειτα γενεσθαι·
> Νυν γαρ δη γενος εστι σιδηρεον·

> "O that I had not been doomed to live among
> Men of the *fifth* race; but that I had either
> Died before, or *were to be born after!*
> For *now*, indeed, there is an *iron* race."

And this is confirmed by that profound antiquary *Virgil*, who, in his celebrated description of the *Golden* Age revived, unquestionably refers to several of the preceding passages, and furnishes an excellent supplement, as it were, to *Hesiod*. Eclog. 4.

> *Ultima Cumæi* venit jam carminis *ætas:*
> Magnus *ab integro* sæclorum nascitur ordo.
> Jam redit et *Virgo*, redeunt *Saturnia regna:*
> Jam *nova progenies* cœlo demittitur alto.
> Tu modo nascenti puero, quo *ferrea* primum
> Desinet, ac toto surget *gens aurea* mundo,
> Casta fave *Lucina:* tuus jam regnat *Apollo.*—
> Ille *Deûm* vitam accipiet, *Divisque* videbit
> Permixtos *Heroas;* et ipse videbitur illis,
> *Pacatumque reget patriis virtutibus orbem.*—

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life, when going to be sacrificed: επειδη γεννηθεις αποθανοιη, "*since you must die soon after your birth!*" Ant. i. 13, 3. And *Hesiod* himself has explained it shortly after by αιψα γηρασκοντας τοκηας, men "*speedily growing old after they become parents.*" Vers. 185. *Newton* has miserably misunderstood the meaning, and perverted the application of this passage; 1. by supposing that it related to the men *then living* in *Hesiod's* days; and 2. that it was applicable to the preceding ages, when the men *then living* in each of them should grow old also, as symptomatic of their dissolution.

* This gradual deterioration of the *Iron* Age is well expressed by *Horace:*—

> Damnosa quid non imminuit dies!—
> Ætas *parentum*, pejor *avis*, tulit
> *Nos* nequiores; mox daturos
> *Progeniem* vitiosiorem.—OD. 3, 6, 45.

> Alter erit tum Tiphys, et altera quæ vehat *Argo*
> Delectos *Heroas* : erunt etiam altera bella,
> Atque iterum ad *Trojam* magnus mittetur *Achilles*.—
>
> Omnis feret omnia Tellus.—

Here " *the last age*," " the *renewal* of a great succession of generations," " the return of the virgin, *Astræa*, or *Justice*," who had fled near the close of the *Iron* Age; " the return of *Saturn's* reign," which began with the *Golden* Age; " the birth of this *Apollo* at the end of the *Iron* Age, and recommencement of the *Golden*;" " his living the life of the *gods*, and conversing with *(Divis)* the *Demons*, *Demigods*, and *Heroes*;" and " the restoration of universal *peace* and *plenty*," as in *Saturn's* reign, &c. all convey the strongest marks of reference to *Hesiod's* account of the ages.

Virgil, however, professed to record only the " *Cumæan* Sibyl's *prophecy*;" and *Hesiod*, too, might have derived his ages of the world from the same source; for this *Sibyl*, or wandering prophetess, *Phœbi Triviæque* Sacerdos, " priestess of the *Sun* and *Moon*," came originally, we are told, from *Babylonia*, and settled at *Cuma*, on the coast of *Italy*, about or after the time of the destruction of *Troy*, where she was supposed to have lived to the reign of *Tarquin*, to whom she offered for sale her prophecies, comprised in nine volumes; of which the king at length, after she had burnt the rest, purchased three, for the same price she had demanded, at first, for the whole. But *Hesiod's* father lived at *Cuma*, and removed from thence to *Ascra*, in *Bœotia*; consequently, he might have been acquainted with that early tradition of six millenary ages of the world, which prevailed throughout the East, and was propagated to the West, by the *Sibyls* and others: which perhaps was founded on *Balaam's* prophecies, foretelling the coming of CHRIST. " A star shall arise from *Jacob*," &c. And it is truly remarkable, that " the Star of our salvation," the true *Apollo*, or " Sun of righteousness," " the Prince of *peace*," was actually born in the course of the sixth millenary age, about A.M. 5411, or shortly before, according to our rectification; and began that partial *regeneration* of the world, which the true word of prophecy tells us will be completed at his second advent in glory.

The adulation of *Virgil*, indeed, misapplied this *Sibylline* prophecy, to the infant of whom *Scribonia*, the wife of *Augustus*, was then pregnant, in the year of *Pollio's* consulship, B.C. 40; but

who, belying the poet's prediction, proved to be a daughter, according to *Dio Cassius*, namely, the infamous *Julia*, as she afterwards turned out. See *Martyn's* learned Notes on the fourth Eclogue of *Virgil*, p. 156.

The age of *Hesiod*, therefore, (to return to that) was not "within 30 or 35 years after the destruction of *Troy*," as *Newton* misrepresents, but rather the *Parian* date, B.C. 944, not less than 239 years after; nay, it was probably more than 239 years: for *Thucydides* declares, that "*Homer* was born *a long time* after the Trojan war;" and *Homer* flourished B.C. 907, according to the *Parian* Chronicle, only 37 years after *Hesiod*. And *Herodotus* also, born B.C. 484, represents *Hesiod* and *Homer* as living *not above* 400 years before his time, or about B.C. 884 *, which is about 300 years lower than the established date of *Troy*. And this testimony of *Herodotus*, "the oldest historian of the *Greeks* now extant," which *Newton* himself cites, p. 160, militates most strongly against him; for B.C. 884, substracted from his curtailed date of *Troy*, B.C. 904, leaves only an interval of 20 years; which is altogether absurd, as well as inconsistent with the foregoing, of 30 or 35 years.

I strongly suspect that *Newton* himself was aware of this absurdity and inconsistency, and to hide it, referred the time of *Hesiod* and *Homer*, by a round-about reckoning, to the remoter date of *Solomon's* death, instead of immediately referring it to the nearer date of *Troy*. "And therefore (says he) *Hesiod* and *Homer* flourished (B.C. 884.) *within* 110 or 120 years after the death of *Solomon* (B.C. 979.) and according to my reckoning, the taking of *Troy* was but one generation earlier," p. 160. We miss, indeed, in his *Chronology*, that luminous arrangement, accuracy, and precision, which mark his earlier productions in *philosophy* and *mathematics*; for $979-884=95$ years only.

I have been thus particular in noticing and correcting the leading errors and defalcations in *Newton's Grecian* Chronology, because it is the most ingenious, and also the most elaborate, abstruse, and difficult part of the work; and because, from the imposing authority of his great name, it is still held in estimation by some respectable historians and chronologers. For although it has been censured by many of the learned—*Whiston* and *Bedford*, in 1728, the very year of its publication; *Shuck*-

* *Clemens Alexandrinus* says, that *Lycurgus*, when he was a young man, conversed with *Homer*. He afterwards collected his *Rhapsodies*, or scattered poems, together.

ford, in 1730; *Atwell* and *Robinson*, in 1737; *Squire*, in 1741; *Costard*, in 1746; *Musgrave*, in 1772; and *Freret* and *Larcher*, in *France*, either in the whole, or in part; yet still we find it adopted by the learned authors of the Ancient *Universal History*, and preferred by others since; by the ingenious *Howard*, in his Thoughts on the Structure of the Globe, 1797, by the latest and best historian of *Greece*, *Mitford* *; and by a professed chronologer, *Walker*, so recently as 1796, who, though he censures some parts of the work, and justly rejects the supposed identity of *Sesostris* and *Sesac*, yet still adopts his subsequent dates of the *Argonautic* expedition, the return of the *Heraclidæ*, and the destruction of *Troy*; and even reduces the date of the last to B.C. 900, four years later than *Newton*. He seems to have been led into this by a fond wish to vindicate the now generally acknowledged *poetic licence* of *Virgil*, in making "*Æneas* coeval with *Dido*," although she flourished about 300 years before him, by the most correct account: *Walker's* reduced date, B.C. 900, exceeding only by 17 years, *Newton's* date of the foundation of *Carthage*, B.C. 883. See his *Analysis of Historical Time*, p. 392.

Latin Chronology.

This also has suffered from *Newton's* chronological pruning-knife. He has, without scruple, lopped off 126 years from the established date of the foundation of *Rome*, which he reduces to B.C. 627, by the following arguments drawn from the reigns of the *Roman* and *Alban* kings:—

1. "The reigns of the seven kings of *Rome* are reckoned at 244 years † from the building of Rome to the regifuge. But this can scarce be reconciled to the course of nature: for I do not meet with any instances in all history, since Chronology was certain, wherein seven kings, *most of whom were slain*, reigned 244 years in continual succession, [or, $34\frac{6}{7}$ years a piece.] The seven reigns of the kings of *Rome*, *four or five of them being slain, and one deposed*, may, at a moderate reckoning, amount to 15 or 16 years apiece, one with another. Let them be reckoned at 17 years apiece, and they will amount to 119 years, which, counted backwards from the regifuge, An. 1. Olymp.

* See *Mitford's Appendix* to chap. iv. b. 1. *Of the Chronology of Grecian History.*

† Regnatum *Romæ* ab conditâ urbe ad liberatam, annos ducentos quadraginta quatuor. *Livy*, 1, 60.

68, (or B.C. 508.] will place the building of Rome, B.C. 627." p. 37, 127.

It is indeed unquestionably true, that an average of nearly 35 years to a reign is too long, where *Romulus* and *Tullus Hostilius*, probably, and *Tarquinius Priscus* and *Servius Tullius*, certainly, were slain, and *Tarquinius Superbus* deposed; more especially in an elective government, where, as *Plutarch* observes, "not one of them left his crown to his son:" for *Ancus Martius*, and *Tarquinius Superbus*, though of royal families, were not the sons of their predecessors, and the other five were of different families, foreign as well as native.

But, on the other hand, in turbulent and elective monarchies, *interregnums* are longer and more frequent than in hereditary; and indeed, from the constitution of the Roman government at that time, they necessarily took place on every demise: the senate or patricians appointing an *interrex*, until the successor should be elected, and the election ratified by the people assembled in Comitia. Thus *Livy* notices one after the death of *Romulus* *, which lasted a year; he mentions two more after the deaths of *Numa* † and *Tullus Hostilius* ‡, but without stating their duration; and he observes, that *Tarquinius Superbus* expedited the election, in order to exclude the young sons of his predecessor, *Ancus Martius* §. We may therefore fairly infer, that there were *interregnums* also after the deaths of *Tarquinius Priscus* and *Servius Tullius*, though unnoticed by *Livy*; and that as they were both murdered, their long reigns included interregna of considerable length.

Though *Livy* seems undecided upon some points in the history, such as the precise year in which the battle at the lake *Regillus* was fought, shortly before the death of *Tarquinius Superbus*, and complains much of the confusion of the annals of that period, after the capture of Rome by the *Gauls* ||, yet he

* *Annuum* intervallum regni fuit. Lib. 1, c. 17.

† *Numæ* morte ad *interregnum* res rediit. Inde *Tullum Hostilium*—regem populus jussit. c. 22.

‡ *Mortuo Tullo*, res, *ut institutum jam inde ab initio erat*, ad patres redierat; hique *interregem* nominaverant. Quo comitia habente, *Ancum Martium* regem populus creavit. c. 32.

§ Jam filii [*Anci*] prope puberem ætatem erant. Quo magis *Tarquinius* instare ut *quam primum* comitia regi creando fierent. Quibus indictis, sub tempus pueros venatum ablegavit. c. 35.

|| Tanti errores implicant temporum, aliter apud alios ordinatis magistratibus, ut nec qui consules secundum quosdam, nec quid quoque anno actum sit, in tanta vetustate non rerum modo, sed etiam auctorum, digerere possis. Lib. 2, c. 21.

expresses no doubt of the duration of the regal dynasty for 244 years. And his detail of the reigns critically corresponds to the outline; which is also confirmed by *Dionysius* of *Halicarnassus.*

Roman Kings.

	Livy.	B.C.	*Dionys.*	B.C.
1. *Romulus*	37 ..	753	38 ..	754
Interregnum	1			
2. *Numa Pompilius*	43 ..	715	43 ..	716
3. *Tullus Hostilius*	32 ..	672	32 ..	673
4. *Ancus Martius*	24 ..	640	24 ..	641
5. *Tarquinius Priscus*	38 ..	616	38 ..	617
6. *Servius Tullius*	44 ..	578	41 ..	579
7. *Tarquinius Superbus*	25 ..	534	29 ..	538
Regifuge	244 ..	509	245 ..	509

The death or disappearance of *Romulus* (who probably was murdered, and made away with by the senators) during a thunder-storm, and a great obscuration of the day, *Liv.* 1, 16, seems to correspond accurately to a solar eclipse on May 26, B.C. 715; which therefore may tend to verify his reign of 38 years, including the interregnum, commencing B.C. 753; and furnishes a powerful astronomical argument against *Newton's* reduction. It is remarkable, that in the whole course of his Chronology, he has neglected, or designedly omitted, the infallible evidence of well-attested *eclipses*, because, perhaps, they would not bend to his favourite hypothesis. Such prepossession is really surprising in so great a philosopher. Indeed the *Varronian* era of the foundation of Rome, B.C. 753, is fully established by the combined weight of *historical* and *astronomical* evidence, as will be proved in the ensuing *Chronological Apparatus.*

2. *Newton's* next argument is drawn from his reduced date of the destruction of *Troy*, B.C. 904; from which, if counted downwards, the reigns of the 14 *Alban* kings, at his reduced average of 20 years apiece, amounting to 280 years, would end B.C. 624, giving the foundation of Rome three years lower than his former reduction, p. 126. But this is equally inconclusive, as will appear from the following rectification of their Chronology:—

Alban Kings.

	Y.	B.C.
Destruction of *Troy*	10	1183
1. *Æneas* builds *Lavinium*	8	1173
2. *Ascanius*	38	1165

		Y.		B.C.
	Ascanius founds *Alba longa* *		....	1143
3.	*Æneas Sylvius*	29	....	1127
4.	*Latinus Sylvius*	51	....	1098
5.	*Alba*	39	....	1047
6.	*Atis*	26	....	1008
7.	*Capys*	28	....	982
8.	*Capetus* (13)	31	....	954
9.	*Tiberinus* †	8	....	923
10.	*Agrippa*	41	....	915
11.	*Romulus Sylvius*	19	....	874
12.	*Aventinus*	37	....	855
13.	*Proca*	23	....	818
14.	*Numitor* and *Amulius*	42	....	795
	Foundation of *Rome*	430	....	753

In this list, collected from *Livy*, *Ovid*, and *Dionysius Hal.* the duration of the whole, 430 years, is determined from the establishment of the extreme dates; according to which, the intermediate reigns, taken from *Dion. Hal.* are adjusted with a slight amendment. By mistake, he split *Æneas Sylvius* into two separate kings, and thereby increased the list to 15. Retaining, therefore, the reign of the former, 29 years, as correct, I have substituted the 31 years of the latter, instead of the 13 assigned by him to *Capetus*, in which there is a deficiency of 18 years, requisite to complete the whole period of 430 years. Deducting, therefore, the ten years from the destruction of *Troy*, to the building of *Lavinium*, from which we may date the reign of *Æneas*, these 14 kings, in the course of 420 years, give an average of 30 years apiece. This sufficiently accords with the course of nature, in a *lineal* succession of kings, at that early period; especially, when in the case of *Ascanius*, there was a *minority* ‡, which also might have happened in others, and thereby have increased these reigns nearly to the standard of generations.

3. *Newton* himself assigns different amounts of the *Latin* and *Roman* kings, and of the average of their joint reigns. At first,

* Inter *Lavinium* et *Albam longam* coloniam deductam, triginta ferme interfuere anni. *Liv.* I. 3.

† *Tiberinus*, in trajectu *Albulæ* amnis submersus, celebre ad posteros nomen flumini dedit. Ibid.

‡ Nondum maturus imperio *Ascanius Æneæ* filius erat: tamen id imperium ei ad puberem ætatem incolume mansit: tantisper tutelâ muliebri (tanta indoles in *Laviniâ* erat) res Latina, et regnum avitum paternumque puero stetit. Liv. I. 3.

p. 66, 67, misled by *Dionysius Halicarnass.* he reckons 15 Latin and 7 Roman kings, or 22 in all, and allowing them 18 years apiece, he assigns to them a period of 396 years. But afterwards, tacitly correcting the mistake, p. 126, 127, he reduces the Latin kings to 14, with *Livy*, and the whole to 21; and now, counting these reigns at 19 years apiece, he gets an amount of 399 years, nearly corresponding with the former. Thus does this literary *Procrustes* torture dates, by arbitrarily stretching or contracting them to fit the iron bedstead of his hypothesis! when he lengthens the kings, he shortens the reigns, and *vice versâ*.

His ingenious advocate, *Hooke*, infers from *Livy*, I. 40, where he speaks of the 38th year of *Tarquinius Priscus*, as being *almost a hundred years* after the reign of *Romulus* *, which, by the received Chronology, was 137 years, that he disregarded it. —*Remarks on the History of the seven Roman Kings.* But this does not follow: for the sons of *Ancus*, in whose mouth he puts the observation, when conspiring the death of *Tarquinius Priscus*, purposely abridged the time, to excite odium against the succession of *Servius Tullius*, his son-in-law, as if indignant, that in so short a time after the reign of a god, the *Romans* could be so degenerate as to submit to the government of "a slave, and the son of a slave †!" Though *Livy*, in his very concise summary, mentions neither the *lives* nor the *reigns* of the *Alban* kings, and only the reigns of the *Roman*, yet he evidently adopted the received chronology respecting both, and this after mature research at the most enlightened period of Roman history.

Egyptian Chronology.

It is in this branch of his work that *Newton* has erred most grievously. Misled and perplexed by his radical mistake of *Sesostris*, for *Sesac*, he has introduced inextricable confusion into the whole system of *Egyptian Chronology*, and the most extraordinary anachronisms.

1. The Shepherd Dynasty, who conquered Egypt before

* —— *Post centesimum fere annum,* quàm *Romulus* Deo prognatus, Deus ipse, tenuerat regnum—id servus, servâ natus, possideat!

† *Crevier*, in his note on the passage, judiciously observes:—Centesimus jam et duodequadragesimus agebatur annus ex quo *Romulus* decesserat: sed filii *Anci* consulto decurtant annorum numerum ad augendam invidiam ex ipsa temporum vicinitate.

Abraham's days, about B.C. 2159, as will be shewn hereafter, and came originally from *Arabia*, according to *Manetho*, is lowered by *Newton* to the days of *Joshua*, above 500 years, and converted into the *Canaanites*, who fled from *Joshua*, and retired in great numbers into Egypt, and there conquered *Timaus (Thamus*, or *Thammuz,)* king of the lower Egypt, and reigned there under their kings *Salatis*, *Bœon*, *Apachnas*, *Apophis*, *Janias*, *Assis*, &c. until the days of *Eli* and *Samuel;* when, in the days of the former, they were expelled from Egypt by *Misphragmuthosis*, &c.; and in the days of the latter, B.C. 1100, the *Philistines*, strengthened by the access of the Shepherds, conquered *Israel*, and took the ark. P. 9, 10.

2. The list of *Egyptian Kings*, furnished by *Herodotus*, is thus altered by *Newton*, p. 246, 247:—

Herodotus.	B. C.	*Newton.*	B. C.
1. *Menes*	2412	4. *Sesostris*	974
* *			
2. *Nitocris*............	1742	5. *Pheron*..............	
* *			
3. *Mœris*	1327	6. *Proteus*	909
4. *Sesostris*	1308	1. *Menes*	
5. *Phœron*	1275	7. *Rhampsinitus*	887
6. *Proteus*	1214	3. *Mœris*	860
7. *Rhampsinitus*	1124	8. *Cheops*..............	825
8. *Cheops*	1082	9. *Cephren*	824
9. *Cephren*	1032	10. *Mycerinus*	808
10. *Mycerinus*..........	986	2. *Nitocris*	802
* *			
11. *Asychis*	815	11. *Asychis*	788
12. *Anysis*	771	12. *Anysis*..............	788
13. *Sabacon*............	769	13. *Sabacon*	751
Anysis again........	719	*Anysis* again	
14. *Sethon*	713	14. *Sethon*..............	751
15. Twelve contemp. Kings	673	15. Twelve contemp. Kings	
16. *Psammitichus*	658	16. *Psammitichus*	655
17. *Nechus*	619	17. *Nechus*..............	617
18. *Psammis*	603	18. *Psammis*	
19. *Apries*	597	19. *Apries*	
20. *Amasis*	569	20. *Amasis*..............	
21. *Psammenitus*........	529	21. *Psammenitus*	

In his first ten kings *Newton* has strangely dislocated the order of *Herodotus;* in the last eleven he follows the same. To *Newton's* list I have assigned the dates collected from his *Short Chronicle;* to that of *Herodotus* the results of the ensuing rectification of *Egyptian Chronology*.

The errors and derangements of *Newton* in this branch of Chronology are wild and extravagant.

1. He annihilates all *Egyptian* Chronology before the time of *Joshua*, though Sacred History testifies that it was a considerable kingdom in the days of *Joseph* and *Jacob*, and even of *Abraham;* and it is represented among "*the first of the kingdoms*," after the Deluge, by the united voice of sacred and profane history.

2. He leaves a great chasm between the time of *Joshua* and the accession of *Rehoboam*, or from the supposed expulsion of the *Shepherds* to the supposed commencement of the reign of *Sesostris*, his *Sesac*.

3. *Sesostris*, the fourth mentioned by *Herodotus*, is made the founder of the Egyptian empire, at least 334 years lower than his truer time; and *Menes* *, the real founder, according to *Herodotus*, is degraded to the fourth place, and rated above 1500 years lower than his time. *Nitocris* also, the second noticed by *Herodotus*, and long before *Mœris*, is thrust down to the tenth place, and rated 940 years below her probable time. The reign of *Cheops* †, the supposed founder of the first of the great pyramids near *Memphis*, to whom *Herodotus* had expressly assigned 50 years, is reduced by *Newton* to a single year; and that of *Cephren*, the supposed builder of the second, is reduced from 56, to 16 years.

4. On the other hand, he places *Sethon*, priest of *Vulcan*, too high, by 38 years; for his reign is accurately determined from Scripture to B.C. 713; since, according to *Herodotus*, he reigned in the year of *Sennacherib's* invasion of *Egypt*. And in consequence of this mistake, he reckons no less than 96 years from the time of his accession to the sole reign of *Psammitichus*, who was one of the twelve contemporary kings, and who dethroned the rest; and has given him a reign of 38 years more. So that, deducting the true length of *Sethon's* reign, 40 years, *Psammitichus* reigned conjointly with the twelve kings, 56 years; and in all 94 years!—a period equivalent to five reigns, according to his reduced standard, $5 \times 19 = 95$ years.

Who now can read, without surprise and wonder, *Newton's*

* In the Short Chronicle, *Menes* is dated B.C. 912; and put before *Proteus*, B.C. 909. P. 28, 29.

† 825. "*Cheops* reigns in *Egypt*. He built the greatest pyramid for his sepulchre." P. 32.

final statement of the result of his discoveries in chronology. P. 8.

"I have drawn up the following *chronological table* so as to make *chronology* suit (1.) With the *course of nature* [in the exact lengths of *reigns* and *generations*]; (2.) With *Astronomy* [in the *precession of the equinoxes* and *achronycal* risings of the stars]; (3.) With *Sacred History*, [in the times of the *Shepherd* invasion of *Egypt*, and of *Sesostris*, or *Sesac*]; (4.) With *Herodotus*, the father of History, [in the *order* and *times* of the *Egyptian* kings]; and (5.) With *itself*: without the many *repugnancies* complained of by *Plutarch*."

"I do not pretend to be exact to *a year*: there may be errors of *five* or *ten* years, and sometimes *twenty*; and not much above." ——*Credat Judæus!*

The rest of his chronology relates to the *Assyrians*, *Babylonians*, *Medes*, and *Persians*; it abounds, indeed, with considerable errors and anachronisms, but not of such magnitude or moment as these already described. I shall, therefore, wave them, for fear of protracting this review to a disproportionate length; and conclude with some conjectures on the causes which probably contributed to his deplorable failure in *Chronology*.

1. By a rare felicity of genius, this great man possessed, in an extraordinary degree, the art of collecting, combining, and amalgamating a great variety of unconnected, and seemingly discordant materials, drawn from widely different sources, *History*, *Mythology*, *Antiquities*, *Etymology*, and *Astronomy*, into one common mass of evidence. But his arguments were frequently fanciful and inconclusive, because he was more attentive to their number than to their weight; and he seemed to shut his eyes sometimes against the strongest, when they militated against a favourite hypothesis. Thus the positive and united testimony of the *Parian* Chronicle, *Thucydides*, and *Herodotus*, infinitely out-weighing all his counter-authorities, to determine the true time of *Hesiod*, were of no avail to change his pre-conceived opinion.

2. By a procedure still more unjustifiable, he did not scruple to *wrest evidence*, or strain a testimony to a sense foreign from its true import, in order to support his hypothesis. Thus he introduces Scripture to prove the identity of *Sesostris* and *Sesac*, from the supposed conquests of the latter: to whom, according to his interpretation, "GOD *gave the kingdoms of the lands*."

2 Chron. xii. 8. pp. 69, 219. But this is a mistake: the text only signifying that to punish the *Jews*, for their rejection of the *Theocracy*, or Divine government, GOD gave them into the hand of *Sesac;* and put them under that severer yoke of *human tyranny* under which the neighbouring kingdoms or countries groaned: "*that they may know* [the difference between] *my service, and the service of the countries* around:" or, as well explained by *Josephus*, "that they might learn, whether it were less burthensome to *serve man* rather than GOD."

He is also equally incorrect in his etymological analogy between the names *Sesostris* and *Sesac.* The true name of the *Egyptian* hero was *Seth*, *Sethos*, or *Sethosis*, which the Greeks metamorphosed, according to their fashion, into *Sesostris:* but, שישק, *Sisak*, (or שושק, *Susak*, as it is written, 1 Kings xiv. 25) may most easily and naturally be derived from ש, (in composition, the contraction of אשר) *qui*, and שקה *(Sakah) bibit;* it might therefore have been an appellation signifying a "*tipler*" or "*drunkard* *," given to the Egyptian king, in derision or contempt. And nothing is recorded of him in Scripture, but his sacrilegious plunder of the temple, and of the royal treasures at *Jerusalem*, and return home again. How different his name and actions from the noble character and extensive conquests of the ancient *Egyptian* hero!

By a similar mistake, from those passages of Scripture, that "the *Egyptians* might not eat bread with the *Hebrews:* for that *was an abomination to the Egyptians;*" because "*every shepherd* is an abomination to the *Egyptians*," Gen. xliii. 32; xlvi. 34; he infers: that "the *Egyptians*, in the time of *Joseph*, were under the government of the *genuine Egyptians*, and not under that of the *Shepherds*," p. 198. But he is mistaken in supposing that this happened *before* the government of the *Shepherds;* the text plainly proves that it was *after;* for why, unless from their *past* sufferings, ending with the expulsion of the Shepherds, about 30 years before, and which therefore were not yet forgotten, should "*every shepherd* be an abomination to the *Egyptians?*"

3. But the chief cause of his failure was *suppression of*

* In this sense evidently, the word ששך, "*Sesach*," is applied to the last king of *Babylon*, as prophetic of the *drunken feast*, during which the city was surprised and taken by *Cyrus*, Jer. xxv. 26; li. 39—57. This anniversary feast was called by the Greeks, Σακεαι ἡμεραι.

evidence. Every time he transcribed the work, he shortened it, by leaving out some of the authorities and references on which he had grounded his opinion. This necessarily rendered his *sixteenth* and last copy the most imperfect and unsatisfactory of all; for surely in the course of 30 years he must have *forgotten* or *mistaken* several of his original documents: we have seen instances of both. Besides it savoured too much of *self-sufficiency* to attempt to obtrude his own opinions upon the world, without deigning to state or explain the grounds of them.

Thus, in his *Egyptian Chronology,* the foregoing dates assigned by him, in the *Short Chronicle,* to the kings of *Egypt,* have not even the shadow of proof; not a trace of them remains in the body of the work, if ever it existed there. Several of them appear like the fictions of a disordered imagination; and his ingenious, but visionary system, upon the whole, resembles "the fantastic forms in an evening cloud: we seem to descry castles, and mountains, and gigantic appearances; but while we gaze, the forms die away, and we are soon lost in gloom and uncer tainty." *Bryant.*

VIII. *Chronology of* KENNEDY.

This is a most eccentric system, and deserves to be noticed for its singularity. It is purely *astronomical;* the chronology of it being subservient to the astronomy; whence he denominates the work, *Physiological Chronology,* as distinguished from *Historical.* Introduct. p. 11.

He begins *à priori* from the date of the Creation, which he arbitrarily assumes to have been in the year B.C. 4007, three years higher than *Usher,* because it possessed some remarkable *astronomical* characters; namely, that the autumnal equinox, when he supposes the world to have been created, began 1. at noon, 2. at the time of full moon, and 3. on the fourth day of the week: and on these data he frames his system, in a bulky quarto volume of about 750 pages.

The following is an outline of his *Sacred Chronology:*—

	Y.	A.M.	B.C.
The Creation	1656 ..	1 ..	4007
Deluge..........................	222 ..	1656 ..	2351
Terah	130 ..	1878 ..	2129
Abraham	74 ..	2008 ..	1999

	Y.	A.M.	B.C.
Abraham goes to *Charran*	1 ..	2082 ..	1925
——— goes to *Canaan*............	25 ..	2083 ..	1924
Isaac............................	60 ..	2108 ..	1899
Jacob .... (130)	129 ..	2168 ..	1839
—— descent to Egypt	215 ..	2297 ..	1710
Exode	512 ..	2512 ..	1495
Temple founded	395 ..	3024 ..	983
——— destroyed		.. 3419 ..	588

As he assigns no reasons, it is in vain to seek where he got his dates of the *Exode*, and the foundation of *Solomon's* Temple, which differ from all the foregoing, and even from the *Hebrew* text; though he is a violent stickler for its immaculate purity.

"The *Jewish* Hebrew Text, I will beg leave to affirm, has never been corrupted in the article of *Chronology*, either by Jew or Pagan, by chance or design." P. 141.

———" It is not more certain that there are a *sun* and *moon* in the heavens, than it is, that not a single error of the press, or of a *Jewish* transcriber, has crept into the present copies of the *Masorete* Hebrew text, to give the least interruption to its chronological series of years." P. 277.

Such extravagant and revolting assertions would better become a bigotted *Jewish* Rabbi, than a rational English Divine. His arbitrary postulates of the astronomical characters requisite for the commencement of the world, according to the *Mosaic* account, are imposed on the public with a confidence ill corresponding to their fancifulness. *Ferguson*, in his letter to *Kennedy*, calls the astronomical part of his scheme, "a train of scientific deceptions." And *Ferguson* was an able practical astronomer. He allows *Kennedy*, however, the merit of confirming what others had suggested; namely, the coincidence of the first day of the week, under the *Jewish* and *Christian* dispensation, with the seventh of the *Patriarchal*. This, however, appears to be exceedingly doubtful, if not repugnant to the *Mosaic* account, of the revival of the Sabbath in the wilderness, after it had been lost during the *Egyptian* servitude.

Kennedy has brought down his chronological series from his year of the Creation, B.C. 4007, to A.D. 1761, the accession of his present Majesty, *George* III. in two tables: the former, a very long table of the entire series of years, in the first 69 pages of the work. To this he has accommodated, with great labour and

considerable ingenuity, a large set of *solar* and *lunar* tables, beginning from his assumed era of the world, which seem to agree surprisingly in the computation of *eclipses*, with the results of the most skilful modern astronomers, computed from the most approved tables in present use. His method is certainly simpler and shorter, and may serve to give near conclusions, where strict accuracy is not required. There is also another abridgment of the former long table, in five pages, 145—150. And this, from A.D. 137, the end of *Ptolomy's* canon, is certainly useful, as exhibiting a continued and connected series of reigns, down to A.D. 1761, which is not to be found in one view elsewhere. It is given in the *Elements of Technical Chronology*, with some corrections.

The plan of this work might perhaps have been suggested by the system of *Alphonsus*, king of Castile, A.D. 1252. This scientific prince supposed that the world began with a cycle of 7000 years, comprehending the anomaly of the motion of the *Apsides*, and ending according to his computation, A.D. 16, which 16 years subducted from the whole period, left his epoch of the Creation, B.C. 6984. See *Muller's* edition of the *Alphonsine* Tables, and *Spanheim's Chron. Sacra.* P. 147.

IX. *Chronology of* PLAYFAIR.

Principal *Playfair*, of St. *Andrew's*, *Scotland*, published, in 1784, a splendid and useful folio volume, which may be considered as an improvement of *Blair's Chronology.* It is both *technical* and *historical:* beginning with an account of the principles of the science, and of the chief *epochs, eras,* and *periods* used in Chronology; proceeding to a short *chronological history* of the most remarkable kingdoms and states, ancient and modern, from the earliest times to the present; and concluding with a valuable set of *chronological tables* and *charts,* the *chronology of eclipses,* &c. and a copious *biographical index* of the most remarkable persons of every class, in all ages of the world, with concise notes of their respective characters. An improved and enlarged edition of this valuable work is preparing, we understand, for publication.

The following is a comparative outline of his system of *sacred chronology,* collected from his Tables, p. 310, 311, the basis of which, uninfluenced by *Kennedy's* infallible calculations, he places a year higher, B.C. 4008, following in general, though

occasionally deviating from, the received systems, derived from the *Jewish Chronology.*

	Y.	J. P.	A. M.	B. C.
Adam	1656	714	1	4008
Deluge	222	2362	1656	2352
Terah	70	2584	1878	2130
Abraham	74	2654	1948	2060
——— goes to *Charran*	1	2728	2022	1986
——— goes to *Canaan*	25	2729	2023	1985
Isaac	60	2754	2048	1960
Jacob	130	2814	2108	1900
Descent to *Egypt*	215	2944	2238	1770
Exode	540	3159	2453	1555
Temple founded	425	3699	2993	1015
——— destroyed		4126	3420	588

1. With the vulgar chronology of the *Jews*, *Scaliger*, and *Petavius*, he reckons 292 years from the Deluge to *Abraham's* birth, retaining the vulgar error that *Abraham* was *Terah's* eldest son, which was judiciously rejected by *Usher*, *Marsham*, and *Kennedy*.

2. With *Usher* and *Kennedy*, he allows only one year for *Abraham's* stay at *Charran*, whereas the *Jews* and *Petavius* allowed five; the correct number was 15 years.

3. He has enlarged the period from the Exode to the foundation of *Solomon's* Temple, to 540; but this is still too short, and consequently his chronology of this period is cramped and embarrassed, like his predecessors: the correct length was 621 years.

4. He has nearly followed in his assigned duration of the Temple, *Petavius*, 423 years, *Usher*, 424. And, consequently, his chronology of the Kings of *Judah* labours under the same defects as theirs: the correct length was 441 years.

X. *Chronology of* Jackson.

Among the first of the modern school of Chronology who ventured to break through the shackles of the received systems founded on the shorter *Hebrew* computation, was the acute and learned *Isaac Vossius*. Rejecting the *Jewish* chronology altogether, of which the preceding systems were merely modifications, he at once adopted the longer *Greek* computation, derived from the Septuagint version. But as they erred in defect, so his erred in excess, running into the opposite extreme: for his date

of the Creation, B.C. 5598, was soon found to be too high. Still, however, the system of *Vossius* was favourably received in England, and patronized by several learned men; *Hudson*, the editor of *Josephus*, in his notes, *Whiston*, *Kennicott*, &c. until at length the learned, ingenious, and adventurous *Jackson*, reduced his system to a lower standard, nearer to the truth; proposing, as a correcter date of the Creation, B.C. 5426, in his *Chronological Antiquities*, 3 vols. 4to. 1752.

This erudite and elaborate, but desultory work, contains a rich mass of valuable materials and original documents, collected from various quarters, and many ingenious criticisms and conjectural emendations of the received systems. And had the author been more attentive to method, and less diffusive; had he indulged less in fanciful and unfounded hypotheses, such as the *second Cainan*, &c. he would probably have given a more unexceptionable system, and superseded the necessity of the present attempt. That his system requires emendation also, will appear from the following comparative outline, collected from several detached periods, scattered through the first volume, pp. 36, 66, 132, 145, 189.

	Y.	A. M.	B. C.
Adam	2256	1	5426
Deluge	137	2256	3170
Second *Cainan*	389	2393	3033
Dispersion of Mankind	6	2782	2644
Nimrod's Reign	470	2788	2638
Terah	70	3258	2168
Abraham	75	3328	2098
——— goes to *Canaan*	25	3393	2023
Isaac	60	3428	1998
Jacob	86	3488	1938
Levi	41	3574	1852
Cohath	60	3615	1811
Amram	78	3675	1751
Moses	80	3753	1673
Exode	579	3833	1593
Temple founded	428	4412	1014
——— destroyed		4840	586

The fundamental error of this system, is the interpolation of the *second Cainan*, and his generation of 130 years, between those of *Arphaxad* and *Salah*, from the Septuagint version of Gen. xi. 13, where only it is to be found. This mischievous error *Jackson* "held fast, and would not let it go:" he clung to

it with all the fondness of *Newton* for his favourite identity of *Sesostris* and *Sesac;* and he resisted the strongest arguments for its exclusion from the sacred text. This led him, in the construction of his system, to make the time from the Deluge to *Abraham* too long, and the remainder too short. To reduce the former time lower, he adopted the vulgar error that *Abraham* was *Terah's* eldest son, and he allowed no time for his sojournment at *Charran.* And because his errors in excess exceed those in defect, his date of the Creation is somewhat too high. Still his system is preferable to the rest: he has enlarged the period from the Exode to the foundation of *Solomon's* Temple, beyond any of his predecessors, to 579 years, and thereby brought it nearer to the truth; and he has critically determined his fundamental date, B.C. 586, which his predecessors placed two or three years higher.

In the foregoing review of these several systems, I have introduced, along with the years of the *Vulgar Christian Era,* those of the *Julian Period,* and of the *Creation of the World,* because the authors themselves make use of them. But the best and simplest is the first, which proceeds backwards and forwards from a known fixed point: the commencement of the *Julian Period,* being imaginary, and even so, deduced from the *Christian Era;* and the commencement of the *Creation of the World,* varying with each system. Its use, therefore, is only productive of confusion and perplexity. Much is it to be wished that Chronologers would confine themselves to the first, following the example of the *English Bible,* and *Newton,* in his Short Chronicle; or, that if they sometimes unavoidably introduce other *Eras,* (as those of the *Olympiads,* the foundation of *Rome, Nabonassar,* &c.) they would save their readers the trouble of reducing them to the common standard of the *Christian Era.* It would enable them also to reason more clearly themselves.

SECTION II.

IMPROVEMENT OF CHRONOLOGY.

ART. I. RULES OF CHRONOLOGIZING.

WHEN we survey the strange variety and discordancy of the several received systems of Chronology, scarcely two of them agreeing, even in their fundamental dates, and all differing from each other, more or less, in the principles of their construction, and in the application of those principles; sometimes adjusting sacred chronology by profane, and sometimes the reverse, without any settled rule or standard; we may naturally be led to despair of any solid or scientific improvement of the subject; especially at this advanced season, after the failure of so many of the greatest *Scholars*, *Historians*, *Mathematicians*, and *Astronomers* *; when no fresh documents can be expected; and when many valuable records, to which the earlier Chronologers had access, are now lost and swallowed up in the abyss of time. A modern Chronologer declares: " If it is easy to *pull down* the system of *Chronologists*, it is by no means so to *build up* in their room one that can support itself against all difficulties: *I do not even believe it possible*." *Larcher*. *Herodote*, Tom. I, p. 309, 1st Edit.

It is indeed " easy to *pull down*," as may appear from the foregoing section: but " to *build up*," is most difficult;—to cleanse the *Augean* stable of the mass of errors, accumulated in the course of ages, and still accumulating from the indolent practice of building upon decayed and rotten foundations, at present, is a task most arduous and truly *Herculean*. Still, however, though difficult the attempt, it is by no means " *impossible*," in *Larcher's* desponding style, provided the work be undertaken in a right way, and pursued upon a correct plan; provided certain fixed and established principles, or *rules of chronologizing*, be laid down and steadily adhered to; and that the original records and documents still subsisting, be more closely inspected, and more critically compared together, than has been hitherto done; and that Sacred Chronology be made

* *Scaliger*, speaking of the requisites for a Chronologer, says, *Nemo, nisi liberalibus disciplinis, et omnigenis artibus initiatus, accedat*. And perhaps the failure of so many may be ascribed to their being only *partially* qualified for the study: few possessing all the requisites,

the invariable basis and standard of profane, by reference to which the whole of ancient Chronology must be adjusted, as by the only certain criterion. For as the venerable *Theophilus*, Bishop of *Antioch*, the earliest Christian Chronologer, observed:

Ὁ πας χρονος και τα ετη δεικνυται τοις βουλομενοις πειθεσθαι τῃ Αληθειᾳ.

"*The whole time* [from the Creation] *and the years* [since] *are discoverable by those who are willing to obey* THE TRUTH."

Nor is *Chronology*, at present, in a more wretched state than was *Philosophy* before the days of *Newton;* during the reign of the *Aristotelian*, *Ptolomaic*, and *Cartesian* systems; furnishing but too much occasion to the profane remark of the scientific *Alphonsus:* that if "GOD *had deigned to consult him at the Creation, he could have given* HIM *good advice!*" Indeed, *Ptolomy's epicycles*, to account for the regressions of the planets; *Descartes's vortices*, to account for their annual motions; and the eternity of the world, according to the *Peripatetic* system, were revolting to reason and science, and repugnant to the laws of mechanics, and of natural history.

The same admirable methods and the same means that were so successfully employed by the illustrious *Newton*, in raising *Experimental Philosophy* from her low estate of vassalage, under fanciful and unfounded *hypotheses*, to her proper rank and dignity as a *science*, are still open in *Chronology*. Had he exerted the same "*patient thinking*," (to which he modestly attributed his success in *Philosophy* and *Mathematics*) the same cool and unprejudiced judgment, the same dislike to idle *hypotheses*—"*hypotheses non fingo*"—in his *chronological* studies, we should not have to regret the waste of his time, and the perversion of his great talents, for the last thirty years of his life; nor would there probably have been occasion for the present rectification of Ancient Chronology. Even before *Newton*, the sagacious *Bacon*, in his *Improvements of the Sciences*, skilfully pointed out the course to be pursued by the *Chronologer:*

"By *persevering industry*, and by *scrupulous attention* to *genealogies*, *monuments*, *inscriptions*, *names*, *titles*, *traditions* and *archives*, *fragments of history*, and *scattered passages* from *rare books* on very different subjects, may a VENERABLE TABLET be preserved from the *shipwreck of time;* a work *operose* and *painful* to the author, but extremely *delightful* to his readers."

But "persevering industry" and "scrupulous attention" may

be helped considerably by the following *Canons*, or *Rules of Chronologizing*, suggested by *Newton's Rules of Philosophizing*, in his *Principia*, lib. iii. And such indeed are still more necessary in *Chronology* than in *Philosophy*, on account of the greater obscurity of the subject, the wider range of materials to be collected and compared together, and the various and perplexing degrees of evidence, or counter-evidence, they are capable of affording in all their different bearings and aspects.

RULE I. *To adhere to the Scriptural Standard.*

The oldest records of time now extant are unquestionably the *Mosaical.* They are much earlier than the fragments of *Sanchoniatho*, *Berosus*, and *Manetho*, and indeed exhibit internal evidence of a purer and remoter antiquity, free from those monstrous fictions and absurdities, under which these heathen records caricature the venerable features of primæval history. The only sure and certain *pole-star*, to guide our wandering steps through the mazes, the deserts, and the quicksands of *ancient* and *primæval Chronology*, in which so many adventurers have been lost or swallowed up, by following the *ignis fatuus* of their own imaginations, or the treacherous glare of *hypotheses*, are the SACRED SCRIPTURES, well understood, and carefully and critically compared together; for otherwise, they also may be perverted into sources of error and confusion. "If we take THE BIBLE along with us, it is a teacher that will direct us through all the obscurity and maze of things, solve every difficulty, and lead up truth to the fountain-head." *Ellis.* "The purest and most fruitful source of *ancient history* is, doubtless, to be found in the HOLY BIBLE." *Bielfield.*

"The history recorded by *Moses* appears like a bright but remote object, seen through the glass of an excellent optician, clear, distinct, and well defined; but when we look back upon the accounts transmitted concerning the *Assyrians*, *Egyptians*, *Medes*, and *Scythians*, or those of the early ages of *Italy* and *Greece*, we find nothing but a series of incredible and inconsistent events, and groups of strange beings,

> Abortive, monstrous, and unkindly mixed,
> *Gorgons*, and *Harpies*, and *Chimeras* dire."

Such is the just and beautiful imagery of the learned and ingenious, but sometimes over-fanciful *Bryant*.

This was the primary canon prescribed by the earliest Christian Chronologer *Theophilus*, in the foregoing passage, when by "THE TRUTH" he evidently meant HOLY WRIT, as appears from the following restriction:—"We are ignorant, perhaps, of the accurate amount of *all the years*, because *current months* and *days* are not set down in the SACRED WRITINGS."

And to the neglect of this canon we may trace up much of that heterogeneous mixture of *sacred* and *profane chronology*, which disgraces and embarrasses the systems of *Scaliger*, *Usher*, *Petavius*, &c. Had these great men, for instance, attended more closely to the sacred Scriptures, they would not have adopted that gross error of the double capture of *Nineveh*, nor would *Newton* have identified *Sesostris* with *Sesac*. If, on the other hand, the present work shall be found to have improved, in any respect, upon its predecessors, the improvement may be principally ascribed to the careful study of, and rigid adherence to, THE ORIGINAL SCRIPTURES OF THE OLD AND NEW TESTAMENT.

RULE II. *To begin with the Analytical Method, and end with the Synthetical.*

The former part of this rule is well expressed by *Dodwell*: *A certioribus temporibus ad incertiora progrediendum*, "To proceed from the [*nearer*] times which are more certain, to the [*remoter*] which are more uncertain," or from "*known* to *unknown dates*."

The nature and application of the *Analytical* and *Synthetical* methods, is thus admirably taught by *Newton*, in his *Optics*, p. 380.

"As in *Mathematics*, so in *Natural Philosophy*, the investigation of *difficult* things by the method of *Analysis*, ought ever to precede the method of *Composition* [or *Synthesis*.]

"This *Analysis* consists in making experiments and observations, and in drawing general conclusions from them by *Induction*, and admitting of no objections against the conclusions, but such as are taken from *experiments*, or other *certain truths*: for *hypotheses* are not to be regarded in *Experimental Philosophy*. By this way of *Analysis*, we may proceed from *compounds* to *ingredients*, &c. and in general from *effects* to their *causes*, and from particular causes to more general ones, till the argument end in the most general. This is the method of *Analysis*.

"And the *Synthesis* consists in assuming the *causes* discovered and established as *principles*, and by them explaining the *phænomena* proceeding from them, and proving the explanations."

And *Newton* himself has finely illustrated the application of these methods in his *Optics* and *Principia*, and also in his *Chronology*. In the last of these works, he investigated, by the *Analytical* method, his four cardinal epochs of *Grecian* Chronology, beginning with the lowest, the return of the *Heraclidæ*, as best known, and ending with the highest, the return of *Sesostris*, as least known, and connecting the intermediate epochs with each other, and with the extremes. And again, from these cardinal epochs assumed as principles, he has deduced several subordinate dates, as *Deucalion's* flood, the arrival of *Cadmus* in Greece, the flight of *Danaus*, &c.

The great *Basil* recommended the *Analytical* method for the discovery of the duration of the world.

"It is possible for you to learn from what time the creation of this world began, if *going backwards from the present to the past*, you shall endeavour to find out the first day of the creation; for by this method, you will find out from whence time acquired its first motion," as measured by the motions of the *sun* and *moon*.

And as a key to the right understanding of the plan upon which the following work was constructed, the leading elementary date, by reference to which the whole range of *sacred* and *profane Chronology* has been adjusted, is the birth of *Cyrus*, B.C. 599, which led to his accession to the throne of *Persia*, B.C. 559; of *Media*, B.C. 551; and of *Babylonia*, B.C. 536: for, from these several dates, carefully and critically ascertained and verified, the several respective chronologies of these kingdoms branched off; and from the last especially, the destruction of *Solomon's* temple by *Nebuchadnezzar*, B.C. 586, its correcter date; which led to its foundation, B.C. 1027; thence to the *Exode*, B.C. 1648; thence to *Abraham's* birth, B.C. 2153; thence to the reign of *Nimrod*, B.C. 2554; thence to the *Deluge*, B.C. 3155; and thence to the *Creation*, B.C. 5411. And this date of the Creation is verified by the rectification of the systems of *Josephus* and *Theophilus*, as will be shewn in the sequel.

RULE III. *Not to adopt any Date, that shall be repugnant to any other established Date.*

This rule is essentially requisite to give uniformity and consistency to the whole system of Ancient Chronology, sacred and profane.

Thus, the generally received date of the destruction of *Solomon's* temple, B.C. 588, is inconsistent with the true and only date of *Nebuchadnezzar's* reign, B.C. 604, as established and verified by *Ptolomy's* scientific canon; by the application of which, the unfounded hypothesis of a double commencement of his reign, during his father's life, and after his death, is discarded.

The sagacious *Jackson* detected an error of two years even in *Ptolomy's* celebrated canon, but he omitted the necessary compensation in the reign of *Cyrus*, as dated from the capture of *Babylon*, B.C. 536. This rectification of the canon itself discovers the correct date of the expiration of the *Babylonish* captivity, which has been hitherto an apple of discord among the chronologers.

RULE IV. *Never to frame an Hypothesis, nor to assign a conjectural Date, except in Cases of downright Necessity.*

Thus, until every other resource had failed, I did not venture to assume the preaching of *Jonah* to the *Ninevites*, B.C. 800, according to *Jackson's* conjecture; that of the Bible Chronology, B.C. 862, being too early: nor the accession of *Astyages*, B.C. 601, two years before the birth of his grandson *Cyrus*. *Petavius* has an excellent remark on the subject, which cannot be too carefully attended to by Chronologers:—"As nothing is more easy, so nothing is less tolerable, than to transfer to the most ancient writers the fault of our own error and unskilfulness; on the contrary, nothing is more prudent and more desirable than to attribute very much to the authority and fidelity of the ancients; and not to recede therefrom, unless when we are admonished and convinced by the clearest and plainly necessary indications of truth." *Petav.* Vol. II. p. 87. Indeed, to *rash conjectures*, and *fanciful hypotheses*, may we attribute very much of the disrepute which the science of Chronology has unjustly incurred, by the treatment it has experienced even from *Scaliger*, *Petavius*, *Usher*, *Newton*, and *Jackson*.

RULE V. *Carefully and critically to distinguish between different Persons, in different Ages and Countries, called by the same Name; and, on the other Hand, to unite or identify Persons bearing different names, in different Authors, or at different Times of their Lives.*

The diversity of persons bearing the same name, and the diversity of names attributed to the same person, in sacred and profane history, form two of the most frequent and prominent causes of error and perplexity in adjusting sacred and profane Chronology. Thus *Nimrod*, and one of his descendants in the *Assyrian* empire, were both called *Ninus*, and the exploits of the former attributed to the latter, to the great embarrassment of the history: on the other hand *Sesostris*, the celebrated Egyptian conqueror of *Herodotus*, was called *Sethosis* and *Osymanduas* by *Diodorus Siculus*, and *Vexoris* by *Justin*, &c.

By the sober and skilful application of these rules, suggested experimentally, and matured gradually, in the course of these researches, both by my own mistakes, and those of my predecessors, in this most abstruse and difficult investigation; and by more careful and critical revision and comparison of all the various original documents, still extant, of ancient *History*, *Antiquities*, *Etymology*, *Mythology*, and *Astronomy*, connected with *Chronology*, I am persuaded, that the whole of Ancient Chronology, Sacred and Profane, may be reduced to one simple, uniform, and consistent system, in which all the parts shall correspond with each other, and with the whole, without "the many *repugnancies* most justly complained of," in all the systems that have hitherto appeared; and the whole be brought to the highest degree of *probability*, bordering on *moral certainty*, beyond which it cannot be raised, from the imperfection of several of the leading *data*: for "*who can count the sand of the sea, and the drops of rain, and the days of the world*," with absolute certainty, but HE that made them all—THE ANCIENT OF DAYS.

ART. II. REVISION AND COMPARISON OF THE SHORTER HEBREW, AND LONGER GREEK COMPUTATIONS, IN THE PATRIARCHAL GENEALOGIES.

The removal of *error* is the first step towards the discovery of *truth*. Let us therefore proceed to examine carefully and critically the most ancient of these venerable documents, which have survived the ravages of time, and are still extant in the records of the genealogies of the *antediluvian* patriarchs, Gen. v. and of the *postdiluvian*, Gen. xi.; for upon these, every system of Patriarchal Chronology must necessarily be built.

The first circumstance that strikes us on comparing these lists, as they are given in the *Masorete* and *Samaritan* Hebrew texts, in the Greek version of the *Septuagint*, and in *Josephus*, (who was well acquainted both with the original *Hebrew*, and with the *Greek* version) is a remarkable difference in the lengths of the successive generations, amounting to 600 years in the antediluvian, and to 700 years in the postdiluvian; and which, it is evident, could not have originated from *accident*, but from premeditated *design*: for in the Hebrew, the centenary deficiencies in the lengths of the generations are added to the residues of the lives; whereas, in the Greek version, the centenary additions to the lengths of the generations are subducted from the residues of lives, so as to make the totals of lives equal, according to the following tables.

GENERAL TABLES OF PATRIARCHAL GENEALOGIES.

TABLE I. BEFORE THE DELUGE.

	GENERATIONS.				RESIDUES.			LIVES.		
	Heb.	*Sam.*	*Sept.*	*Joseph.*	*Heb.*	*Sam.*	*Sept.*	*Heb.*	*Sam.*	*Sept.*
1. *Adam*	130	130	230	230	800	800	700	930	930	930
2. *Seth*	105	105	205	205	807	807	707	912	912	912
3. *Enos*	90	90	190	190	815	815	715	905	905	905
4. *Cainan*	70	70	170	170	840	840	740	910	910	910
5. *Malaleel*	65	65	165	165	830	830	730	895	895	895
6. *Jared*	162	62	162	162	800	785	800	962	847	962
7. *Enoch*	65	65	165	165	300	300	200	365	365	365
8. *Methuselah*	187	67	187	187	782	653	782	969	720	969
9. *Lamech*	182	53	188	182	595	600	565	777	653	753
10. *Noah*	600	600	600	600						
Deluge	1656	1307	2262	2256						

TABLE II. AFTER THE DELUGE.

	GENERATIONS.				RESIDUES.			LIVES.		
	Heb.	*Sam.*	*Sept.*	*Joseph.*	*Heb.*	*Sam.*	*Sept.*	*Heb.*	*Sam.*	*Sept.*
1. Deluge. *Shem*	2	2	2	12 ..	500	500	500..		600	
2. *Arphaxad* ...	35	135	135	135 ..	403	303	403..		438	
[*Cainan* II...			130]				330]			
3. *Salah*	30	130	130	130 ..	403	303	303..		433	
4. *Eber*	34	134	134	134 ..	430	270	270..		404	
5. *Peleg,* or *Phaleg*	30	130	130	130 ..	209	109	209		239	
6. *Reu,* or *Ragau*	32	132	132	130 ..	207	107	207..		239	
7. *Serug*	30	130	130	132 ..	200	100	200..		230	
8. *Nahor*	29	79	79	120 ..	119	69	129..		148	
9. *Terah*	70	70	70	70 ..	135	75	135..	205	145	250
10. *Abraham*	292	942	1072	993						
Totals	1948	2249	3334	3249						

Thus, *Adam's* generation, or his age at the birth of *Seth*, is reckoned by the *Masorete* and *Samaritan* Hebrew texts, 130 years; the residue of life, 800 years; and the total, 930 years; whereas, in the *Septuagint* and *Josephus*, the generation is enlarged to 230 years; the residue of life diminished to 700 years; so as to make the total 930 years the same *.

Besides this general and uniform difference of the addition or subtraction of a century, in the respective lists of generations, there are considerable variations in the four lists of the *Masorete*, *Samaritan*, *Septuagint*, and *Josephus*, some of which must be accidental, others designed.

Originally, however, there did not exist any remarkable difference between the Hebrew and Greek copies. This we learn from the important attestations of *Philo* and *Josephus*, those great antiquaries and historians.

Philo, of *Alexandria*, who flourished in the Apostolic age, thus speaks of the accuracy and fidelity of the Greek version, and of the high veneration in which it was held by the *Jews* in his time:—

"The 72 interpreters seriously reflected with themselves, how

* This remark is as old at least as *Augustine's* time, who flourished about A.D. 395. "In his autem continuatur ipsius *mendositatis similitudo;* ita ut ante genitum filium qui ordini inseritur, alibi supersint centum anni, alibi desint; post genitum autem, ubi deerant supersint, ubi supererant desint; ut summa conveniat. Et hoc in *prima, secunda, tertia, quarta, quinta, septima* generatione invenitur. Videtur habere quandam, si dici potest, error ipse *constantiam;* nec *casum* redolet sed *industriam.*—*De Civit. Dei,* Lib. xv. 13.

arduous a task it was to interpret or translate the laws contained in the Divine Oracles, so as neither to add nor diminish, nor to alter any thing, but to retain their original form." And he observes, that the most learned *Jews*, best skilled in both languages, the *Hebrew* (which he calls *Chaldee)* and the *Greek*, at the time it was made, B.C. 240, styled the translators, " not *interpreters* merely, but *prophets*, who with the purest spirit had entered into the genuine sentiments of *Moses*." And he adds, that " an annual festival was celebrated in the isle of *Pharos*, where the version was made, until his time, to preserve the memory of it, and to thank God for so great a benefit." *De Vita Mosis.*

Josephus also, who flourished in the next generation after *Philo*, and published his admirable *Antiquities*, about A.D. 94, relates, that " at the request of *Ptolomy Philadelphus*, king of *Egypt*, a copy of the law [of *Moses*] was sent by the high-priest from *Jerusalem* to *Alexandria*, written in letters of gold, upon leaves of parchment wonderfully joined together. And that the version, after it was finished, was read in public, in order that every one might observe whether it was in any respect redundant or deficient; but the interpretation was adjudged by all to be so well done, that it ought to remain, as it was, without alteration." Antiq. 12, 2, 12, p. 517. Hudson's edit.

And *Josephus* himself, who was well skilled in both languages, professes that he translated his *Antiquities* from the *Hebrew* Scriptures into the *Greek* language, without adding to, or diminishing from, the original, for which he expresses the highest veneration. See his *Life*, §. 2; *Proem:* §. 2, 3; and *Antiq.* 10, 10, 6.

From these joint testimonies of *Philo* and *Josephus*, therefore, we may safely conclude, 1. That there was originally no difference between the Hebrew genealogies and those of the Greek version; and 2. That the computation of *Josephus* was conformable to both in his time; and consequently, 3. That either the *Hebrew* copies, or the *Greek* copies, both of the *Septuagint* and of *Josephus*, have been adulterated since his time.

II. That the adulteration took place in the *Hebrew* copies, rather than in the *Greek*, is most highly probable, for several reasons:

The superstitious veneration for the "*Hebrew verity*," as it was called, or supposed immaculate purity of the *Masorete* editions of the Hebrew text, which possessed some of the prin-

cipal Hebraists and Divines of the last age, and precluded any enquiries or discussions of this nature, is now lowered to its proper level of rational respect. The great *Usher* seems to have entertained juster sentiments on the subject than most of his contemporaries, though he scrupled to innovate in Chronology, or recede much from the received systems in his time; when too many, like *Kennedy*, were obstinately and blindly attached to the Hebrew verity. But the inspection of various editions since, and the copious collations of the Hebrew text with a great number of MSS. collected from all parts of the world, by the laudable industry and extensive researches of *Kennicott* and *De Rossi*, and other learned men, have proved that the *Sacred Classics* are no more exempt from various readings than the *profane*. Nor indeed could it be otherwise, without a *continued miracle*, if we consider the vast number of transcripts that have been made by copiers, more or less skilful, and more or less careful, in all parts of the world; and surely their variations are equally the province of *philological criticism*, to approve some, and to reject others, according to the number and weight of the authorities for or against.

1. Hence the *Hebrew* copies were equally obnoxious to adulteration as the *Greek*.

2. But the *Hebrew* copies afforded greater facilities and opportunities of adulteration than the *Greek:* for, in the course of the *Jewish* war, until the final destruction of *Jerusalem*, and expulsion of the Jews from Judea, in the reign of *Adrian*, vast numbers of the *Hebrew* copies must have been lost or destroyed, besides those that were taken away by the conquerors among other spoils; and the few that were left were confined, in great measure, to the *Jews* themselves, as the *Hebrew* language was not in general use, like the *Greek*. Whereas, of the Greek copies, even if all that were possessed by the *Hellenistic* Jews, not only in *Palestine*, but throughout the world, had been destroyed, which was far from being the case, yet the copies of the Septuagint, in the possession of the *Christians* every where, rendered any material adulteration of the Greek text, at least in so important a case as that of the genealogies, well nigh impossible.

3. The temptation to adulteration was also greater in the *Hebrew* than in the *Greek*.

After the first destruction of *Jerusalem* by *Titus*, A.D. 70, the Jews were so oppressed by their national calamities, that

they could think of nothing else for some time; but about the end of the first century of the Vulgar Era, they were roused to oppose the wonderful progress of Christianity. What principally excited their rage and vexation was, that "their own *scriptures*" were turned into artillery against them, to prove that "JESUS was indeed the CHRIST," from the days of the Apostles. Acts xviii. 28.

In order to bring the Septuagint vulgate version, which was usually referred to by the *Christians*, into disrepute, they instituted a solemn fast on the 8th day of *Tebeth (December)*, to curse the memory of its having been made. Some of the Rabbins compare it to "that unlucky day for *Israel*, when the golden calf was made." See *Hodius* de *Version. Græc.* p. 121. And they set up three other Greek versions in opposition thereto, framed from their curtailed Hebrew text.

The first was that of *Aquila*, published about A.D. 128, two years before the *Seder Olam Rabba*. He was originally a Pagan priest, who became a *Christian*, and afterwards, on his expulsion from the Church for irregular conduct, turned a renegado to Judaism, and became a pupil to that famous Rabbi *Akiba*; "whose name," says *David Ganz*, "is gone forth from one end of the world unto the other, and *we have the whole oral law from his hand*," p. 99: who for 40 years was president of the *Sanhedrim*, and had no less than 40,000 disciples, which qualified him to become one of the most subtile and formidable, as he was one of the most malignant adversaries of Christianity.

And now was written or "sealed" by Rabbi *Jose*, under the auspices and instigation of *Akiba*, the *Seder Olam Rabba*, or Jewish curtailed system of Chronology, A.D. 130, about five years before the total demolition of *Jerusalem*, and desolation of *Judæa* by *Adrian;* in the course of which war, *Akiba*, and the false Christ and rebel *Barchocab*, whom he abetted, were slain, and their adherents destroyed. See *David Ganz's* Chronology, entitled *Zemach David*, "the branch of *David*," translated by *Vorstius*, pp. 1, and 106, where this curious and valuable account of the time of the publication, and of the authors of the *Seder Olam Rabba*, is given.

Aquila is charged by *Epiphanius* with wresting Scripture, contrary to the interpretation of the Septuagint version, to a different sense, *in order to invalidate the testimonies concerning* CHRIST. De *Mensur.* et *Pond.* Cap. 15. And an unpublished

Greek tract in the *Bodleian* library, inspected by *Kennicott*, relates, that "*Aquila* being filled with much rage, and imagining mischiefs in his heart, was transported by an unjust envy, and anathematizing Christianity, he became a *Jew;* and having assiduously learned the power of the Hebrew elements, and being superficially instructed in the Hebrew tongue, he interpreted Scripture, *wishing to conceal the testimonies concerning* CHRIST. Whenever, therefore, you find in the *Hebrew*, (for even there also he obliterated) or in the *Greek*, *the testimonies concerning* CHRIST *disguised*, know that it was the insidious contrivance of *Aquila*." See the original passage in the masterly *Dissertatio generalis* subjoined to the second volume of *Kennicott's* Hebrew Collations of the Bible, §. 69.

Justin Martyr, also, in his controversy with *Trypho*, the *Jew*, about A.D. 148, produces several instances of their altering or erasing the prophecies relative to the divinity, passion, and death of CHRIST, out of the copies of the *Septuagint* vulgate version used in their synagogues. "Your *Rabbis*, says he to *Trypho*, "*have absolutely expunged many passages out of the Septuagint version*, as I would have you to know."—"Still I will argue with you even from those received passages which ye admit, *which if your Rabbis had understood, be assured they would have expunged them*."

This testimony of *Justin Martyr*, who was himself a *Samaritan*, and understood the *Hebrew* Scriptures also, is of the greatest weight; and the following of *Irenæus*, who died A.D. 202, decides the point:

"*If the Jews* (says he) *had known that we should have made use of those testimonies that are to be drawn from the Scriptures, they would never have hesitated themselves to burn their own Scriptures.*"

Hence we may safely conclude, that the adulteration was rather of the *Hebrew* genealogies than of the *Greek;* and that it was introduced, probably by *Aquila*, just before the time of the fabrication of the *Seder Olam Rabba*, A.D. 130, founded thereon.

Aquila published two editions of his version; about A.D. 185, a second translation was published by *Theodotion*, whom *Jerom* calls "a *Jew* and a *blasphemer*." This was principally designed to supersede the use of the vulgate version of the Septuagint among the *Jews;* which it soon did, as it more nearly resembled the style of that formerly venerable, but now obnoxious version, than *Aquila's*. *Theodotion's* translation of the book

of *Daniel* was introduced into the *Christian* Churches also, as being deemed more accurate than the Septuagint, and thus the Septuagint version of that book was unfortunately long lost. Still, however, the rest of the version was providentially retained and preserved; for with all its numerous errors and corruptions at present, it is still one of our most useful and valuable helps to the understanding of the *prophecies* especially, because it was written before the birth of CHRIST, when there was no temptation to adulteration. A third translation was afterwards made by *Symmachus*, A.D. 200. He was a *Samaritan* and an *Ebionite* Christian, and gave a freer translation than the rest, according to *Eusebius*.

Although the corruption of the Hebrew genealogies began as early as *Aquila's* version, A.D. 128, and was sanctioned by the *Seder Olam Rabba*, A.D. 130, yet it does not appear to have made any considerable progress for two centuries after. *Theophilus*, bishop of *Antioch*, who died A.D. 181, was the first Christian chronologer who attempted to compute the age of the world from Scripture. In his third book to *Autolycus*, he reckoned 2362 years from the creation to the deluge, and 1036 years from the birth of *Arphaxad*, two years after the deluge, to the birth of *Isaac*, which would give 938 years from the deluge to the birth of *Abraham*. These dates are incorrect: the first being too high, the last too low. But that he did not take them from the *Septuagint* is evident, because they both differ from it; and he expressly omits the *second Cainan*, found only in the Septuagint; consequently, he took them from some *Hebrew* copy, which followed the longer computation, and he allowed from *Adam* to *Seth* 330 years, a century more than the Septuagint.

Indeed, the shorter computation did not prevail in the *Hebrew* Bibles until a good while after his death; for *Eusebius*, who died A.D. 340, "found in the *Hebrew* copies which he consulted, different accounts of the times, some following the longer, others the shorter computations."

III. The motive which led the *Jews* to mutilate the *Patriarchal* genealogies, is most clearly exposed by *Ephrem Syrus*, who died A.D. 378.

"The *Jews*," says he, "have subtracted 600 years from the generations of *Adam*, *Seth*, &c. in order that their own books might not convict them concerning the coming of CHRIST: he having been predicted to appear for the deliverance of mankind after 5500 years."

2. This remarkable prediction or tradition, of the appearance of CHRIST in the course of the sixth millenary age of the world, and which was actually fulfilled, is still more fully explained by the excellent *Armenian* annalist *Abulfaragi*, p. 72.

"It having been foretold in the *Law* and the *Prophets* concerning the MESSIAH, that he should be sent in '*the last times*,' and the earlier Rabbins finding no better device to reject [JESUS, as] THE CHRIST, than to alter the generations of the patriarchs, *by which the age of the world might be known*, they subtracted a century from *Adam's* age until the birth of *Seth*, and added the same to his residue of life; and this they did in the lives of the rest of *Adam's* descendants, down to *Abraham*. By this device, their computation shewed that [JESUS] CHRIST was manifested near the middle of the *fifth* millenary of the age of the world, which, according to them, was to last for 7000 years; and they said, *We are still in the middle of the time, and the time appointed for the* MESSIAH'S *advent is not yet come.*"

Here *Abulfaragi* reckons according to the eastern *Jews*, who dated the creation, B.C. 4220, consequently JESUS was born near the middle of their *fifth* age of the world. The western *Jews*, who date it B.C. 3760, following the *Seder Olam Rabba* nearly, depress his birth to the middle of the *fourth* age.

3. The origin of this notion of the six millenary ages of the world, is well explained by the learned *Gregory*, of *Oxford*.

"In the first verse of the first chapter of *Genesis*, the Hebrew letter א, *Aleph*, which in the *Jewish* arithmetic stands for 1000, is six times found. From hence, the ancient *Cabbalists* concluded that the world would last 6000 years. Because also God was six days about the Creation, and *a thousand years with him are but as one day;* (Ps. xc. 4; 2 Pet. iii. 8.) therefore after six days, that is, 6000 years' duration of the world, there shall be a seventh day, or millenary sabbath of rest."

This early tradition of the *Jews* was found also in the *Sibylline Oracles*, and in *Hesiod*, as we have seen; in the writings of *Darius Hystaspes*, the old king of the *Medes*, derived probably from the *Magi;* and in *Hermes Trismegistus*, among the *Egyptians:* and was adopted by the early Christian Fathers, *Clemens*, *Timotheus*, and *Theophilus*, bishop of *Antioch*, who observed, that "upon the sixth day GOD made man, and man fell by sin; so upon the sixth day of the Chiliad, (or sixth mil-

lenary age of the world) our Lord JESUS CHRIST came into the world, and saved man by his cross and resurrection."

"But to weaken or defend the tradition itself," says *Gregory*, "I have no engagement upon me. It yieldeth me this observation, that in the opinion of those who held it, our Saviour was to come in the flesh in the sixth millenary of the world."

The prevalence, therefore, of this tradition throughout the *Pagan*, *Jewish*, and *Christian* world, whether well founded, or otherwise, was a sufficient reason for the *Jews* to endeavour to invalidate it, by shortening their chronology.

IV. The defalcation of the *Hebrew* genealogies is also proved by the concessions of the early Jewish writers:

1. The Targum of *Jonathan Ben Uzziel*, of the highest authority among the Jews, thus paraphrases Gen. iv. 25. "And *Adam* knew his wife *when* 130 *years were completed after Abel was killed*." And the same account is furnished by the *Bereshith Rabba*, *More Nevochim*, *Midrash Tanchuma*, *Solomon Jarchi*, *Elias*, and others of their principal writers. A very ancient book called the *Little Genesis*, also relates that "*Cain* was born in the 70th year of *Adam's* life, and *Abel* in the 77th: that *Cain* brought his sacrifice in the 97th year of the world, and that *Abel* offered his in the 99th year, when he was slain by his brother." By this reckoning, *Abel* was slain about the beginning of the 100th year of the world, or end of the first century; which, added to the 130 years of *Adam's* abstinence from his wife, gives the birth of *Seth* when *Adam* was 230 years old: exactly conformable to the Greek chronology of the Septuagint and of *Josephus* *.

2. The apocryphal book of *Enoch*, which certainly was older than the Christian era, and probably as old, if not older than the Septuagint Version, and was cited by the Apostles *Jude* and *Peter*, states that the *Egregori*, or "Watchers," of the line of *Seth*, called "*Sons of God*," Gen. vi. 2, came down from the high country of *Eden*, where they dwelt, in the days of *Jared*, in the 1070th year of the world, and took to them wives of the *daughters of men*, or family of *Cain*, who dwelt in the low country of *Susiana*. But this date corresponds to the 110th year of *Jared*, according to the Greek chronology: whereas it is utterly repugnant to the Hebrew; which would bring down the

* *Jacobus Edessenus*, who flourished about A.D. 700, states, that he found in some sufficiently accurate *Hebrew histories*, that *Adam* begat *Seth* when he was 230 years old.

defection of the *Egregori*, to the 14th year of *Noah's* age. See *Syncellus* Chronograph. p. 12, 16.

This same book of *Enoch*, as cited by *Alexander Polyhistor*, states that the archangel *Uriel*, who presided over the stars, discovered to *Enoch* * the nature of the *month*, and of the *tropical year* [of 365 days] in the 165th year of his age, and 1286th year of the world, which exactly accords with the *Greek* chronology, but differs totally from the *Hebrew*.

V. This defalcation is proved also by internal evidence the most undeniable.

1. In the *Antediluvian* genealogy, the centenary addition is still found in the sixth, eighth, and ninth generations of *Jared*, *Methuselah*, and *Lamech*. Had these been curtailed, like the rest, their lives would have extended beyond the Deluge, contrary to Scripture: for, deducting their three centuries, the Deluge would have happened in the 1356th year of the world: consequently, had their three centuries been added to their residues of lives, like the rest, *Jared* would have survived the Deluge 66 years; *Methuselah*, 200 years; and *Lamech*, 95 years. Not daring, therefore, to shorten the lives of these three patriarchs, the *Jews* were forced to let the original amounts of their generations remain unaltered.

And that this was their motive, is demonstrated by the case of the seventh, *Enoch*: they, without scruple, deducted a century from his generation, and added it to his residue of life; because his life was short, and would not reach to the Deluge; so that the forgery could not be detected.

The reason also why they deducted six centuries and no more, was, that according to their reduced period of 1656 years, *Methuselah* died in the year of the Flood; and *Lamech*, five years before it. This was probably the work of *Aquila* at first.

The *Antediluvian* genealogy is still more corrupt in the *Samaritan* Pentateuch, both in generations and lives. At first the *Samaritans* did not venture to shorten the lives of *Jared*, *Methuselah*, and *Lamech*; they only substracted a century from *Jared's* generation, and added it to his residue of life, which brought his death within 134 years of the Flood. And so their copies generally stood in the time of *Origen*, about A.D. 230; and some, even until *Jerom*, about A.D. 392. But afterwards

* It is remarkable that *Enoch's* age, 365 years, gives the number of days in a year. The coincidence is curious without recurring to *Rabbinical* mysticism.

they grew less scrupulous; and in order to make the whole genealogy appear more uniform, they deducted a century from each of the remaining generations of *Methuselah* and *Lamech*. But then they were forced to shorten their lives also, to bring their deaths within the compass of the Deluge. By this management, *Jared*, *Methuselah*, and *Lamech*, all died exactly in their year of the Deluge, A.M. 1307: furnishing palpable evidence of the double forgery. With great reason, *Kennicott* conjectures, that *Symmachus*, himself a *Samaritan*, was the author of this. *Dissert. Gen.* §. 84, 4.

2. The *Postdiluvian* genealogy also furnishes internal evidence of its corruption.

The sums total of lives given in the *Antediluvian* genealogy, are omitted in the *Postdiluvian*. The chasm is fortunately supplied, and the genuine lengths of generations restored in the *Samaritan* Hebrew text, as follows:

MASORETE TEXT.	SAMARITAN TEXT.
1. *Shem*, a son of 100 years, begat *Arphaxad* two years after the flood: and *Shem* lived after he begat *Arphaxad* 500 years, and begat sons and daughters:	1. *Shem*, a son of 100 years, begat *Arphaxad* two years after the flood: and *Shem* lived after he begat *Arphaxad* 500 years, and begat sons and daughters: and all the days of *Shem* were 600 years, and he died.
2. And *Arphaxad* lived 35 years, and begat *Salah*: and *Arphaxad* lived after he begat *Salah* 403 years, and begat sons and daughters:	2. And *Arphaxad* lived 135 years, and begat *Salah*: and *Arphaxad* lived after he begat *Salah* 303 years, and begat sons and daughters: and all the days of *Arphaxad* were 438 years, and he died.
3. And *Salah* lived 30 years, and begat *Eber*: and *Salah* lived after he begat *Eber* 403 years, and begat sons and daughters:	3. And *Salah* lived 130 years, and begat *Eber*: and *Salah* lived after he begat *Eber* 303 years, and begat sons and daughters: and all the days of *Salah* were 433 years, and he died.
4. And *Eber* lived 34 years, and begat *Peleg*: and *Eber* lived after he begat *Peleg* 430	4. And *Eber* lived 134 years, and begat *Peleg*: and *Eber* lived after he begat *Peleg* 270 years,

MASORETE TEXT.	SAMARITAN TEXT.
years, and begat sons and daughters:	and begat sons and daughters: and all the days of *Eber* were 404 years, and he died.
5. And *Peleg* lived 30 years, and begat *Reu* [or *Ragau*:] and *Peleg* lived after he begat *Reu* 209 years, and begat sons and daughters:	5. And *Peleg* lived 130 years, and begat *Ragau*: and *Peleg* lived after he begat *Ragau* 109 years, and begat sons and daughters: and all the days of *Peleg* were 239 years, and he died.
6. And *Reu* lived 32 years, and begat *Serug*: and *Reu* lived after he begat *Serug* 207 years, and begat sons and daughters:	6. And *Ragau* lived 132 years, and begat *Serug*: and *Ragau* lived after he begat *Serug* 107 years, and begat sons and daughters: and all the days of *Ragau* were 239 years, and he died.
7. And *Serug* lived 30 years, and begat *Nahor*: and *Serug* lived after he begat *Nahor* 200 years, and begat sons and daughters:	7. And *Serug* lived 130 years, and begat *Nachor*: and *Serug* lived after he begat *Nachor* 100 years, and begat sons and daughters: and all the days of *Serug* were 230 years, and he died.
8. And *Nahor* lived 29 years, and begat *Terah*: and *Nahor* lived after he begat *Terah* 119 years, and begat sons and daughters:	8. And *Nachor* lived 79 years, and begat *Terah*: and *Nachor* lived after he begat *Terah* 69 years, and begat sons and daughters: and all the days of *Nachor* were 148 years, and he died.
9. And *Terah* lived 70 years, and begat *Abraham*, *Nahor*, and *Haran*:—and the days of *Terah* were 205 years, and *Terah* died in *Charran*.	9. And *Terah* lived 70 years, and begat *Abraham*, *Nahor*, and *Haran*:—and the days of *Terah* were 145 years, and *Terah* died in *Charran*.

This uniform chasm, or omission of the total lives of the first eight patriarchs, was introduced early into the *Masorete* Hebrew

text; for it occurs also in the present copies of the *Septuagint*, and in all the other ancient versions; namely, the *Latin* Vulgate, *Syriac*, *Arabic*, *Persic*, and the Targums of *Onkelos* and *Jonathan*. Still, however, the *Septuagint* furnishes evidence of the omission, by retaining the last two words, *και απεθανε*, "*and he died*," throughout the whole. There cannot, therefore, remain a doubt, that the total lives were originally inserted in the ancient *Jewish* Hebrew copies, as well as in the *Samaritan*; no less than the total lives of the *Antediluvian* patriarchs, in both Hebrew texts, and in all the ancient versions. And the centenary addition to the generations of the first seven patriarchs after the flood, is now fully established, by the triple evidence of the *Samaritan* text, the *Septuagint* version, and *Josephus*.

In *Nahor's* generation, the addition in the *Samaritan* is only 50 years, and also in the *Septuagint;* but, according to the system of *Josephus*, it was 400 years. The *Samaritan* agrees with the *Masorete*, or present Hebrew text, in the generation of *Terah*, 70 years; but it differs in reducing the total of his life from 205 years to 145 years. But the correctness of the former number is confirmed by the *Septuagint*, *Josephus*, and all the ancient versions. Indeed the *Samaritan* alteration was grounded on the vulgar error that *Abraham* was *Terah's* eldest son; for 70 years, the supposed age of *Terah*, at his birth, added to *Abraham's* age of 75 years, when he left *Charran* after his father's death, would make the whole of *Terah's* life 145 years. But it was proved before (in the review of *Usher's* Chronology) that *Abraham* was most probably the youngest of the three sons, and *Haran* certainly the eldest.

And that the number 205 was originally in the *Samaritan* copies, we may collect both from *Origen* and *Jerom:* who both agree in reckoning that *Abraham* was 135 years old in reality, when he left *Charran:* but that the Scripture reckoned him only 75 years; because it was then only that he came to the knowledge of God; the preceding 60 years of his life, he having been addicted to the idolatry of the *Chaldeans*. Although they were wrong in the supposition that *Abraham* was born in the 70th year of *Terah*, yet it is evident that they reckoned *Terah's* whole age 205 years. If then the number 205 be genuine, as it unquestionably is, it demonstrates that *Abraham* was born when *Terah* was 130 years old; and of course that he was 60 years younger than *Haran* the eldest, born in *Terah's*

70th year. And this is the opinion adopted by the most judicious Chronologers and Divines, *Vossius*, *Usher*, *Marsham*, *Kennedy*, *Capellus*, *Patrick*, *Wells*, &c.

VI. The patriarchal generations, both before and after the deluge, according to the shorter Hebrew computation, are repugnant to the course of nature.

Arrian, the historian, justly observes:

"It is natural that they who are soonest liable to old age and death, should in proportion to the shortness of their life arrive soonest at the flower and vigour of their age." The converse is also concisely expressed by *Augustine*: *Tanto serior erat proportione pubertas, quando vitæ major immensitas.* "The time of *puberty* was so much slower in proportion, when the *length of life* was so much greater." And the following objection to the curtailed generations before the deluge, is strongly urged by *Eusebius*:

"Since according to the most ancient copy preserved among the *Samaritans*, and which agrees with the *Septuagint* version, they who lived after the flood, down to *Abraham*, did not beget children until after the age of 100 years, and so many more as these copies give them, what reason can be assigned, why their predecessors [before the flood], whose lives were many years longer, should begin to beget children sooner? and not rather at the ages set down in the *Septuagint*? On mature consideration, therefore, we must incline to the latter computation, and necessarily conclude, that the Jewish Hebrew reckoning of the times from *Adam* to *Abraham*, is wrong in all the ages [or generations] except three, *Jared*, *Methuselah*, and *Lamech*; and that the *Samaritan* computation is only wrong in the period from *Adam* to the flood: for in the years from the flood to *Abraham*, it agrees entirely with the *Septuagint*."

Dividing human life into three periods, it appears from observation and experience, that the generative powers continue in full vigour during the second period. And according to this rule, *Noah* was near the close of his second period, when at the age of 600 years he begat *Japheth*, his eldest son, and two years afterwards, *Shem*, his second son; and probably after the same interval, at least, *Ham* his youngest. It was not probable, therefore, that the age of puberty among the Antediluvians, who lived to 900 years and upwards, began sooner than 160 or 170 years, corresponding to 14 or 15 years at present.

Thus, by the same rule *Terah's* eldest son, *Haran*, was born at the commencement of his second period; and *Abraham*, his youngest, near the close of it; bearing a remarkable analogy to *Noah's* case.

Among the Greeks, the celebrated legislator *Solon*, divides human life into ten periods, of seven years each: the third, he reckons the age of puberty, from 14 to 21; the fifth he recommends as the age of marriage, from 28 to 35.

> Πεμπτῃ δ' ὡριον ανδρα μεμνημενον αρ' γαμου ειναι,
> Και παιδων ζητειν εξοπισω γενεην.
>
> "In the fifth, 'tis time for man to think of wedlock.
> And seek to leave behind a progeny of sons *."

And this accords with *Hesiod's* rule:

> Μητε τριηκοντων ετεων μαλα πολλ' απολειπων,
> Μητ' επιθεις μαλα πολλα· γαμος δε τοι ὡριος οὑτος.
>
> "Marry not very much under thirty years,
> Nor very much over: this is the seasonable age †."

But this standard, founded in nature and verified by experience in all ages of the world, is violated by the shorter Hebrew computation: to suppose, for instance, that *Cainan*, *Malaleel*, *Jared*, *Enoch*, and *Methuselah*, begat children between 60 and 70, is to the full as preposterous as to suppose the same of children now, between five and six years. It is repugnant to the orderly course of nature; whose regular "*measures*" and proper "*seasons*," *Hesiod* recommends us to "*mind in all things*."

> Μετρα φυλασσεσθαι· Καιρος δ' επι πασιν αριστος.

VII. The shorter Hebrew computation is also absurd, or inconsistent with history, sacred and profane.

1. *Eusebius* well remarks: "The error of the *Jewish* Hebrew text is evident from this; that it makes *Abraham* and *Noah* contemporaries, which is inconsistent with all history; for, since according to the Hebrew text, there are no more than 292 years from the flood to *Abraham*; and since, according to the same text, *Noah* survived the flood 350 years; it follows that he lived to the 58th year of *Abraham*!

To this judicious remark we may add:

* See *Solon's* verses, in *Philo, de Mundi opificio*, p. 18. Edit. Colon. 1613.

† *Hesiod. opera et dies*, vers. 695.

2. Upon this supposition, *Idolatry* must have begun and prevailed, and the patriarchal government have been overthrown by *Nimrod* and the builders of Babel, during the life-time of the second founder of the *human* race, and his three sons, *Shem*, *Ham*, and *Japheth*.

3. If *Shem* lived until the 110th year of *Isaac*, and the 50th year of *Jacob*, why was not he included in the covenant of circumcision made with *Abraham* and his family? or why is he utterly unnoticed in their history?

4. How could the earth be so populous in *Abraham's* days, or the kingdoms of *Assyria*, *Egypt*, &c. be established so soon after the deluge? As remarked by Sir *Walter Raleigh*: see page 230.

To this objection, *Newton* replies:

" The four kings from the coasts of *Shinar* and *Elam*, who invaded and spoiled the *Rephaims*, and the inhabitants of the countries of *Moab*, *Ammon*, *Edom*, and the kingdoms of *Sodom*, *Gomorrah*, *Admah*, and *Zeboim*, were pursued and beaten by *Abraham*, with an armed force of only 318 men: the *whole force which Abraham and the princes with him could raise.*" Chron. p. 180.

But these 318 men were merely *Abraham's* own domestics; and " the *princes*," nothing more than three young neighbours, who personally joined his party, *Aner*, *Eshcol*, and *Mamre*: and he defeated the combined forces of the enemy, not by force, but by stratagem: for he pursued them in their retreat, and overtook them on the fifth night, secure and careless; and attacked them on two different sides of their camp, when they were oppressed with sleep and wine. As we learn from the joint testimony of SCRIPTURE and *Josephus*, Ant. 1, 10, 1. And the reflection of the Jewish historian is suitable thereto: " The event shewing, that victory does not depend upon a *multitude*, and a *great armament;* but that *spirit* and *valour* will overcome *any number* of adversaries in battle."

This stratagem was not unlike that by which *Gideon* afterwards defeated the numerous host of the *Midianites*, Judg. vi. 12—22. when THE LORD fought for *Israel;* as he did for *Abraham* also.

But proceeds *Newton:* " And *Egypt* was so thinly peopled before the birth of *Moses*, that *Pharaoh* said of the *Israelites*, ' Behold the people of the children of *Israel* are *more* and

mightier than we:' and to prevent their multiplying and growing too strong, he caused their male children to be drowned."

This also is a misinterpretation of Scripture: the meaning is clearly explained in the sequel: "Come, let us deal wisely with them, *lest they multiply;* and it come to pass, that when there falleth out any war, *they join themselves to our enemies,* and fight against us, *and get them up out of the land.*"—Here it is evident, that *Pharaoh* did not *then* consider the *Israelites* as "*more* and *mightier* than the *Egyptians;*" but only used this precaution to prevent their *future increase;* and in case of a *foreign* war, to prevent them from making a powerful diversion, and effecting, not the conquest of *Egypt,* but their own escape from slavery. And *Pharaoh,* we find, was not afraid to pursue 600,000 of the *Israelites,* able to bear arms at least, if they did not carry them, with 600 chosen chariots, and we may be assured an army proportionable thereto, and probably equal at least to that of the *Israelites:* which gives us rather a high idea of the population of the country at that time. And we learn from *Manetho,* that at the time of the expulsion of the *Shepherd kings,* by the native Egyptian princes of upper *Egypt,* (which took place by the ensuing rectification of *Egyptian Chronology,* about 27 years before the regency of *Joseph)* the Egyptian army which besieged *Avaris* or *Pelusium,* their chief retreat, consisted of 480,000 men: and the expelled Shepherds amounted to 240,000 souls.

VIII. I shall close this chain of evidence with an observation deduced from the review of the various opinions entertained of the epoch of the *Creation.* P. 211, &c.

The whole weight of *antiquity* and of the *earliest Fathers of the Church,* is decidedly in favour of the longer Greek computation, *Origen* and *Jerom* excepted; who reckoned it B.C. 4830, and B.C. 3981, respectively; acting under *Jewish* influence *;

* *Jerom* was reproached by *Rufinus,* and not without reason, for conceding too much to the *Jewish* notions, and to his Hebrew preceptor, *Bar Anina,* whom *Rufinus* styles *Barabbas,* in derision.

Rufinus Hieronymo.

Proposito CHRISTO simul et *Barabba,* ego CHRISTUM elegi: tu cum illis clamas qui dicunt, '*Non hunc sed Barabbam.*'—Nolo '*sapientiam*' quam *Petrus* et *Paulus* non docuit; nolo '*veritatem*' quam *Apostoli* non probaverunt. *Apostatæ* quidem et *Judæi* [nempe *Aquila, Theodotion,* et *Symmachus*] interpretati sunt ea, quorum lectione *Judæi* maxime utuntur.—Illi *te* in hæc mala præcipitant; illi pessimis suis artibus *tibi* nimium placent. Tom. 4, p. 424—450.

and whose authority is more than compensated by that of the learned chronologers, *Theophilus* and *Eusebius;* who expressly applied themselves to the study, which the others only noticed casually or incidentally. We may, therefore, without hesitation, adopt the conclusion of *Eusebius.*

"Wherefore it is *with reason* that in our chronology we follow the version of the Septuagint; which was made, as it appears, from an *ancient* and *uncorrupted* Hebrew copy." *Syncell. Chronograph.* p. 88, 89.

ART. III. REJECTION OF THE SECOND CAINAN.

THE *Septuagint* version, however, is not to be followed implicitly: it requires correction in some parts; and principally in the case of the Second *Cainan*, interpolated between *Arphaxad* and *Salah*, to whom a generation of 130 years is assigned.

1. Its high antiquity indeed, previous to the Christian Era, cannot be denied: for it is taken into account by *Demetrius*, a heathen chronologer, who wrote in the reign of *Ptolomy Philopator*, about B.C. 220. He reckoned 3624 years from the Creation to the descent of *Jacob's* family to Egypt; but this is the exact amount of the Septuagint computation, including *Cainan's* generation: For from *Adam* to the birth of *Abraham*, is 3334

And *Jerom* himself confesses, that he gave up the important text of "THE SON [OF GOD,"] Psalm ii. 12. which he had justly called a most signal prophecy concerning CHRIST; נשקו בר, "*Adorate filium,*" for the rendering of *Aquila* and *Symmachus*, "*Adorate pure* *," not to give room to Jewish calumny and superciliousness, boasting of their superior knowledge of the Scriptures. "Ne qua nobis ab *Hebræis* calumnia fieret; solent enim ridere de nobis, et attollere supercilium et inflatis buccis ructare *Scientiam Scripturarum.*"

From the days of *Ignatius* indeed, who died A.D. 116, the constant objection of the *Jews* was, "If I find it not in the *primitive Scriptures*, I credit not what is said in the *Gospel.*"

Hence it was not uncommon for the *Christian* Churches to send deputies, as it were, to the *Jews*, praying and beseeching that "*they would grant them a share of their Hebrew verity:*" As the same *Rufinus* relates, who is surely an excellent counter-authority to *Jerom.*

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* The *Jews*, instead of בַר, *Bar*, "a Son," read בֹר, *Bor*, "purity," altering the vowel points.

years, to which add 75 years, his age on going to *Canaan*, and 215 more from thence to the descent into Egypt, and the sum is exactly 3624 years. And this is further confirmed by his reckoning 1360, (or rather 1362 years, including the two years from the flood to the birth of *Arphaxad)* from the flood to the descent of Jacob's family into *Egypt:* for if from the whole amount, from the Creation to that time, 3624 years, as stated above, we deduct 2262 years from *Adam* to the flood, the remainder is 1362 years.

2. And what strengthens this authority, is, that the *Second Cainan* is inserted in *Luke's* genealogy of CHRIST, iii. 36; the genuineness of which is confirmed by all the ancient versions without exception, and by all the ancient MSS. except *Beza's* or the *Cambridge* MS.

Still, however, the arguments for its exclusion seem greatly to outweigh those for its retention.

1. The *Masorete* and *Samaritan* Hebrew texts, and all the ancient *Versions* and *Targums*, without exception, omit *Cainan* and his generation of 130 years, in Gen. xi. 12.

2. The *Septuagint* version is not consistent with itself; for in the repetition of the genealogies, 1 Chron. i. 24. it omits *Cainan* there, following the Hebrew and all the ancient versions; Αρφαξαδ, Σαλα, Εβερ, &c. *Arphaxad, Salah, Eber*, &c. "The projector forgetting himself," as acutely observed by the learned *John Gregory*, of Oxford, in his *Disproof of the Second Cainan*, A.D. 1663.

3. Those great luminaries of the *Jewish* Church, *Philo* and *Josephus*, both rejected it; for *Philo*, in his allegorical way, reckoned two *decads* and a *septenary* of generations from *Adam* to *Moses;* namely, ten generations from *Adam* to the flood, including *Noah;* ten generations from the flood to *Abraham* *, including *Shem* and *Abraham;* and seven from *Abraham* to *Moses*, including both. But in the second decad, *Cainan* is

* *Berosus*, the *Chaldean* historian, about B.C. 284, indirectly noticed *Abraham*, though without naming him, as "living in the *tenth* generation after the deluge; and celebrates him for his eminent piety and skill in astronomy."

And *Eupolemus*, about B.C. 174, confirms the testimony of *Berosus*, and expressly names *Abraham*, as living in the *tenth* generation after the deluge. These two ancient heathen writers, of whom *Berosus* was earlier than *Demetrius* and the *Septuagint* version are powerful authorities for the rejection of *Cainan;* who, if inserted, would place *Abraham* in the *eleventh* generation from *Shem* inclusively.

evidently omitted. And *Josephus* omits *Cainan* in his list of the postdiluvian patriarchs.

4. *Josephus* obliquely commends *Demetrius*, among those other ancient chronologers, *Philo Senior* and *Eupolemus*, who "did *not err much* from the truth." Contr. *Apion*. 1. §. 23*.

5. *Theophilus*, Bishop of *Antioch*, who wrote about A.D. 168, omits *Cainan* in his list of postdiluvian patriarchs: and his testimony is the more valuable, because it differs from the Septuagint; and was taken, as it seems, directly from the *Hebrew*: Αρφαξαδ ετεκνωσε Σαλα, &c.; but in the Septuagint the verb is different, εγεννησε.

6. The very learned *Origen*, who reckoned the date of the Creation B.C. 4830, lower than *Josephus* and *Theophilus*, necessarily omitted his generation. According to *Procopius*, *Origen* marked him with an obelisk in his copy of the Septuagint, to mark his rejection.

7. *Eusebius* reckoned 942 years from the flood to *Abraham*, and therefore evidently omitted *Cainan*: and he was followed by *Epiphanius* and *Jerom*, both adopting the corrected Hexaplar copy, published by *Eusebius* and *Pamphilus*.

From this combination of counter-evidence, it appears that we are fully warranted to conclude, that "the second *Cainan was not* originally in the *Hebrew* text, and in the *Septuagint* version derived from it†." And since water cannot rise to a level higher than the spring from which it issues, so neither can the authority of the *New Testament* for its retention, rise above that of the *Old Testament*, from which it is professedly copied, for its exclusion.

8. And the learned *Gregory* has ingeniously accounted for the original interpolation of *Cainan*, even so early as the time of

* This appears actually to be the case with *Demetrius*. His date of 3624 years from the creation to the descent of *Jacob's* family to Egypt, exceeds our corrected date 5411 —1863 = 3548 years, only 76 years; and his date of 1360 years from the flood to the descent of *Jacob's* family, exceeds the corrected date 3155—1863 = 1272 years, only 88 years. And deducting these two errors in *excess*, of 76 and 88 years, from *Cainan's* generation of 130 years, which he inserted; they are changed into errors in *defect*, of only 54 and 42 years. *Demetrius*, therefore, is a valuable voucher for our system.

† It is strange how *Jackson*, to whose industry and extensive researches we owe most of these counter-testimonies, should be so blind to their evidence, and so obstinately attached to his hypothesis, as to conclude: "From what has been said, it appears *very evident* that the second *Cainan was* originally in the *Hebrew* text, and in the *Septuagint* version derived from it." Vol. I. p. 79.

Demetrius, and shortly after the *Septuagint* version was composed.

According to the foregoing most ancient tradition of the six millenary ages of the world, they were to be equally divided in the days of *Peleg*, whose name signified "division;" and accordingly, the first 3000 years were supposed to end with the 130th year of *Peleg's* life, or end of his generation, when he begat *Reu*.

The distinctest enumeration of the period is given by *Theophilus*, of *Antioch*, thus:

	Y.		Y.
Adam	330	*Arphaxad*	135
Seth	205	*Salah*	130
Enos	190	*Eber*	134
Cainan	170	*Peleg*	130
Malaleel	165		——
Jared	162		529
Enoch	165		2362
Methuselah	187		——
Lamech	188		2891
Noah	500		
Shem	100		
	——		
Deluge	2362		

The amount of the whole is 2891 years, wanting 110 years to complete the 3000 years. First, therefore, the *Hellenists*, to make it look more unlike a cheat, cut off 20 years from *Methuselah's* sum, which reduced it to 167 years, (as is still found in some copies of the Septuagint;) and consequently, the whole amount, to 2871 years current, or 2870 years complete. Then they inserted a new *Cainan*, assigning him 130 years; which, added to the former, precisely made up the 3000 years required.

This solution is preferable to that of *Suidas*, voce Φαλεκ; who reckons 2242 years from the Creation to the Deluge; and 758 years more from thence to *Phaleg* or *Peleg*, to make up the 3000 years; because *Peleg's* number 758, will not agree to any system of Chronology. Whereas the other only requires the addition of another century to Adam's generation, according to the Septuagint, to make it 330 years with *Theophilus*, which is not incredible.

9. *Gregory* also ingeniously proves, that the second *Cainan* was an imaginary person.

"I find," says he, "in a MS. Chronicle in the *Bodleian* library, that after the flood, *Cainan*, the son of *Arphaxad*, wrote astronomy, having found the doctrine of the stars, written by *Seth* and his sons on tables of stone." But none of all this is due to *Cainan*, the son of *Arphaxad*, but to *Cainan*, the son of *Enos*: as I shall make it appear by as sound a tradition as these, written back to *Aristotle* out of *India* by *Alexander* the Great.

"When I came," saith the king, "into the land of *Pharsaiacon*, &c. the natives said unto me, Lo, here in this isle, is the sepulchre of an ancient king, whose name was *Cainan*, the son of *Enos*, who reigned over the whole world before the flood. He was a wise man, and endued with all kinds of knowledge, and had power given him against the spirits, devils, and destroying angels. This man foresaw by his wisdom, that the blessed God would bring a flood upon the earth; the prophecy whereof he wrote in tables of stone, which we have, and the writing is *Hebrew*," &c.

"This," as *Gregory* quaintly observes, "is the right owner of those parts and inventions. That other *Cainan* was a man of the *Chiliasts'* making; one with whom things stood all otherwise than with *Melchizedek*."

"This man had neither *beginning of days*, nor *end of life*, but in the *genealogies* *."

After this, not a shadow of doubt can, I think, remain of the propriety of expunging the *second Cainan* from the sacred text; more especially as the years attached to his generation are variously stated in different MSS. of *Holmes's Collation* of the Text of the Septuagint.



ART. IV. RESTORATION OF THE CHRONOLOGY OF JOSEPHUS.

THERE is no ancient writer almost, except perhaps *Herodotus*, whose character has been so variously represented, as *Josephus*, the great Jewish Historian and Chronologer. By some he is praised for his veracity, by others censured for his fictions. Among the early Christians, his chronology was in the highest repute; and *Theophilus*, of *Antioch*, seems to have made it the

* Αγενεαλογητος, μητε αρχην ἡμερων, μητε ζωης τελος εχων. Heb vii. 3.

basis of his own. But when the shorter Hebrew chronology gained ground, his system, founded on the longer computation, declined in estimation, and fell into disrepute. Very few of the modern Chronologers, *Scaliger* * excepted, do full justice to his merits: he is sometimes followed where he is wrong, and blamed where he is right. Thus *Marsham* hastily adopts his idle conjecture, that the *Sesostris* of *Herodotus* was the *Sesac* of SCRIPTURE, which afterwards ruinéd the chronology of *Newton;* while he misrepresents *Josephus* as confounding the ancient Arabian *Shepherds*, who conquered Egypt, with the enslaved *Israelites*, long after; than which nothing was further from his intention.—"Hinc itaque facessat illud *Josephi somnium!*"—"the dream" was all his own. P. 102, 103.

Much, however, of the censure that he has undeservedly incurred, is owing to the carelessness and fraud of his early editors. His dates especially, have been miserably mangled and perverted, frequently by accident and frequently by design.‡ Thus, when the present text represents the period from the Creation to the Deluge, 2656 years, although the amount of the intervening generations, from *Adam* to *Noah*, is only 2256 years; this may be reckoned an error of inadvertence. Ant. 1, 3, 3. p. 11. *Hudson's* Edit. But when it is said that "*Abraham* was born in the 292d year after the Deluge;" this is a palpable forgery, designed to wrest *Josephus* into an agreement with the short *Jewish* computation; whereas the actual amount of the generations specified immediately after, from *Abraham* up to *Shem*, is 993 years. Ant. 1, 6, 5. p. 20.

Hence the younger *Spanheim*, in his *Chronologia Sacra*, has devoted an entire chapter to the errors, anachronisms, and inconsistencies of *Josephus;* most of which he acknowledges are derived "from the mistakes of transcribers, or the favourite hypotheses of interpreters;" and concludes with representing "*the recovery of his genuine computation as a matter of great difficulty and hazard* †."

* "Diligentissimus και φιλαληθεστατος omnium Scriptorum *Josephus.*—De *Josepho* nos hoc audacter dicimus, non solum in rebus *Judaicis*, sed etiam in *externis*, tutius *illi* credi quam omnibus *Græcis* et *Latinis.*" *Proleg.* p. 16, 17.

† "Viderint instauratores *antiquitatis temporum* qui *Josephi* calculos suis adaptant! Unum excipi potest, corruptissimos esse *Josephi* codices et oppidò discrepantes, seu in periochis singulis, seu in epilogismis annorum, vitio amanuensium:—ut *de germanâ Historici supputatione statuere sit res aleæ plena.* Unde *tot pugnantes conjecturæ et emendationes.*" Pars II. cap. 3. p. 151—156.

Nothing, therefore, can be more discordant than the dates of the *Creation*, deducible from his present numbers: from one passage there results B.C. 4099, Ant. 10, 8, 5; from another, B.C. 4129; Ant. 8, 3, 1. It is reckoned, B.C. 4698, by the *Universal History*, pref. p. xlviii. folio; B.C. 5481, is collected from *Jackson*, Vol. i. p. 123; B.C. 5555, by *Playfair*; and the times of the history, prefixed to each of the 20 books of his *Antiquities*, by some early editor, amount to 5803 years, from the Creation to the 13th year of *Nero*, A.D. 52, when the *Jewish war* broke out: which deducted from the former amount, gives the date of the Creation, B.C. 5751: the extremes differing from each other no less than 1752 years. From such discordances, *Ludolf* calls *Josephus*, *Antiquitatum Judaicarum Fabulator sæpius quam Historicus*. *Hardouin* boldly pronounces, that *Josephus* was not the author of the works imputed to him, but some Monkish impostors of the thirteenth century; and a German critic, *Emericus Bigotius*, was persuaded that *Josephus* published two different editions of his Antiquities *.

However difficult and hazardous may be the attempt to recover the genuine chronology of *Josephus*, yet it should not be deemed desperate nor impracticable. Much may be done by a careful discrimination and a judicious selection of the genuine dates and numbers which still fortunately subsist in the work, though comparatively few, from the many spurious that disgrace and embarrass it. I shall therefore endeavour, by the help of some genuine dates and numbers, first to trace a correct outline of the Chronology of *Josephus*, and afterwards to confirm it by a detail of the particulars that fill it up, and by their conformity to the general outline.

I. The master-key to his system is found in the noble preface to his *Antiquities*, § 3, p. 3.

"There are ten thousand things noticed throughout the SACRED SCRIPTURES, inasmuch as they contain the history of *five thousand* years. Manifold, indeed, are the unexpected turns of fortune, many the issues of war, the gallant exploits of generals, and the revolutions of states. On the whole, whoso-

* Universi quos inspexi Codices MSS. ita differunt ab impressis, ut conferri plane non possint. Jam pridem credidi, atque etiam nunc mihi persuadeo, *Josephum duplici vice Antiquitates suas vulgasse.* See *Fabricius de Josepho et ejus Scriptis*, prefixed to *Hudson's* excellent edition.

ever desires to peruse it, may learn chiefly from this history, that with those who follow God's will, and dare not transgress his excellent laws, all things succeed beyond expectation, and to such is proposed the reward of happiness from God. But so far as they deviate from careful attention thereto, they fall into difficulties, which though in themselves surmountable, become insurmountable; and whatsoever they are eager to do, as good, is turned into incurable calamities."

The SACRED SCRIPTURES here meant are the *canonical* books of the Old Testament, as appears from another parallel passage at the end of his works, where the same number is repeated. Contr. *Apion.* lib. i. § 1. There he declares, that "his *Antiquities*, translated out of the JEWISH SACRED BOOKS into the *Greek* language, contained the history of *five thousand* years." And shortly after, § 8:—"There are not among *us* myriads of discordant and contradictory books, but only *two and twenty* books, containing the history of all time, which are justly believed *divine;*" namely, "*five* books of *Moses*, which contain *the law*, and the history of events from the creation of man till his death, during a period little short of *three thousand** years; and from the death of *Moses*, to the reign of *Artaxerxes* [*Longimanus*] who succeeded *Xerxes*, king of *Persia*, the *prophets* after *Moses* compiled the history of their times in *thirteen* books; the other *four* contain hymns to God, and moral precepts." But $5 + 13 + 4 = 22$.

And he clearly distinguishes these *canonical* books from the *apocryphal*, written from the time of *Artaxerxes* to his own times, "which are not counted worthy of the like estimation as the preceding, because there was not then an exact succession of *prophets*."

Hence it is evident, that this period of 5000 years included the history from the Creation of man given by *Moses*, in the book of *Genesis*, to *Malachi*, the last of the prophets, inclusively.

The authenticity of this period of 5000 years is unquestionable from its repetition; and it has providentially escaped the depredations of his editors, because it was only mentioned thus

* It ought to be 4000 years: for *Josephus* reckoned from the Creation to the Deluge 2256 years; from thence to the birth of *Abraham* 993 years; and from thence to the death of *Moses* 545 years: the sum total of which, 3794 years, falls short by 206 years of 4000. Besides, the present reading is irreconcileable with his correct period of 5000 years.

incidentally, and not applied formally as a *chronological* character.

In order to develope this period, we must first lay down certain *cardinal* dates, which form "the hinges," as it were, upon which the whole system of *Josephus* turns; and these are—

1. The birth of *Abraham*.
2. The foundation of *Salem*.
3. The foundation of *Solomon's* temple.

1. The date of *Abraham's* birth is no where explicitly stated by *Josephus*, but it may be collected from the following genuine periods still subsisting in his works:—

		Y.	B.C.
Birth of *Abraham*	Ant. 1, 7, 1. p. 21	75 ..	2153
His call to *Canaan*	—— 2, 17, 7. p. 88	430 ..	2078
Exode of the *Israelites*	—— 10, 8, 5. p. 449	1062 ..	1648
Destruction of *Solomon's* temple		1567	586

Ascending, therefore, *analytically*, from the known and correct date of the destruction of the temple by *Nebuchadnezzar*, B.C. 586, we arrive at the date of *Abraham's* birth, B.C. 2153.

2. The foundation of *Salem* by *Melchizedec* is expressly stated to have been 2177 years before the destruction of *Jerusalem* by *Titus*, A.D. 70. *Bell. Jud.* 6, 10, 1. p. 1292. Therefore deducting the date of the latter, we get the date of the former, B.C. 2107, or 46 years after *Abraham's* birth.

From these first two dates, combined with the other known periods, from the *Creation* to the *Deluge*, and from thence to *Abraham*, by pursuing the former *analytical* process, we arrive at the date of the Creation, according to *Josephus*.

	Y.		B.C.
The Creation	2256	....	5402
The Deluge......................	993	....	3146
Birth of *Abraham*	46	....	2153
Foundation of *Salem*..............	2107	....	2107
	5402		

Hence it appears, that the whole period from the Creation to the vulgar Christian Era was 5402 years, from which subducting the time of *Malachi*, or end of the Canon of the Old Testament, B.C. 423, we get the remainder 4979 years, which only

falls short by 21 years of the period of 5000 years in round numbers, which *Josephus* stated as including the whole of sacred history.

We have assumed the time of *Malachi*, B.C. 423, because that was the end of the reign of *Artaxerxes Longimanus*, when *Nehemiah*, the contemporary of *Malachi*, completed his reform of the Jewish polity, both in Church and State, after the return from the *Babylonish* Captivity. But we are warranted to assume a lower time for *Malachi*, from the latitude in the opinions of chronologers: *Prideaux* dating it, B.C. 429; *Usher*, B.C. 415; and *Lloyd*, B.C. 397. If then we choose an intermediate time, B.C. 402, and subtract it, as before, we shall get the exact number 5000 years. But the former is more conformable to the time assigned to *Malachi* by *Josephus*, and certainly he did not mean to be precise as to the very sum.

3. The date of the foundation of *Solomon's* temple is next to be determined.

From the Exode to this foundation two different periods are assigned, or may be collected from the present text of *Josephus*: first, it is expressly reckoned 592 years, Ant. 8, 3, 1. p. 341; and the same may be collected from a set of dates, Ant. 10, 8, 5. p. 449. It is therefore adopted by *Spanheim* and *Jackson*. But it is also expressly reckoned 612 years elsewhere, Ant. 20, 9, 1. p. 899, and p. 1363; and the same may be collected from another set of dates, Ant. 9, 14, 1. p. 428. And this longer period was adopted by *Theophilus* in his Chronology: both however are spurious.

The genuine period may be collected from the foregoing, of 1062 years from the Exode to the destruction of *Solomon's* temple, by the help of another genuine period of 477 years from the capture of *Jebus* by *David*, to the same term. *Bell. Jud.* 6, 10, p. 1292. For, from 1062 years, subduct 477, the remainder, 585 years, will give the time from the Exode to the capture of *Jebus*, 2 Sam. v. 6. To these 585 years add 36 more, (namely 33, for the remainder of *David's* reign after the capture, and the three first years of *Solomon's*) and the sum 621 years will give the correct period from the Exode to the foundation of the temple, in the fourth year of *Solomon's* reign. 1 Kings vi. 1. The number in the Hebrew text, 480 years, is also spurious, as was proved in the review of the *Jewish* chronology.

4. From the determination of this genuine period of 621 years,

and its subtraction from the entire period of 1062 years, we get 441 years; the correct period from the foundation to the destruction of the temple, and consequently that of the reigns of the kings of *Judah*.

II. I shall next proceed to verify this general outline of the system of *Josephus*, by shewing the correspondence of the several parts thereof in detail.

The detail of the *first two periods*, including the generations before and after the deluge, having been given before in the general tables, it is superfluous to repeat it here.

The *third period* is as follows:—

	Y.	B.C.
Abraham's Birth	75	2153
——— he goes to *Canaan*	215	2078
Jacob's Family go to *Egypt*	215	1863
Exode of the *Israelites*	505	1648

See Ant. 2, 15, 2. p. 88. Following *Demetrius*, he has here made an important division of the 430 years noticed in Scripture, (Exod. xii. 41; Gal. iii. 17.) into two equal parts of 215 years each.

The *fourth period* (given incorrectly by *Jackson*, Vol. i. p. 145.) is as follows:—

	Y.	B.C.
Exode, *Moses*	40	1648
Joshua	25	1608
Interregnum	18	1583
I. Servit. *Mesopot.*	8	1565
Othniel	40	1557
II. Servit. *Moab*	18	1517
Ehud	80	1499
Shamgar	1	1419
III. Servit. *Canaan*	20	1418
Deborah and *Barak*	40	1398
IV. Servit. *Midian*	7	1358
Gideon	40	1351
Abimelech	3	1311
[*Tola*	23]	1308
Jair	22	1285
	385	

	Y.	B.C.
Brought forward	385	
V. Servit. *Ammon*	18	1263
Jephthah	6	1245
Ibzan	7	1239
Elon } *Abdon* }	10	1232
VI. Servit. *Philistin.* } *Sampson*, last 20 years }	40	1222
Eli	40	1182
VII. Servit. *Philistin.*	20	1142
Samuel	12	1122
Saul and *Samuel* 18 } *Saul* 22 }	40	1110
David	40	1070
Solomon	3	1030
Temple founded	621	1027

The only alteration here made in the present text of *Josephus*, is the insertion of *Tola*, and his administration of 23 years,

(Judg. x. 1, 2.) which are inadvertently omitted, between *Abimelech* and *Jair*, Ant. 5, 5—6, p. 209. but evidently were included in the original scheme of *Josephus*, as being requisite to complete the period of 621 years.

To *Abdon* no years are assigned by *Josephus*, Ant. 5, 7, 15. p. 215. perhaps designedly, for *Clemens Alexandrinus* relates, that "some chronologers connected together the years of *Abatthan* and *Ebron*, [*Abdon* and *Elon*] or made them contemporary." But we may easily reconcile *Josephus* with SCRIPTURE, by only deducting eight years from the 18 years interregnum after *Joshua*, which will give *Abdon* his quota of years, and leave that interregnum its juster length of 10 years.

It is truly remarkable, and a proof of the great skill and accuracy of *Josephus*, in forming the outline of this period, that he assigns, with St. *Paul*, a reign of 40 years to *Saul*, Acts xiii. 21. which is omitted in the OLD TESTAMENT. His outline, also, corresponds with St. *Paul's* period of 450 years, from the division of the conquered lands of *Canaan* until *Samuel*, the prophet, and will be rendered exactly conformable thereto, in detail, hereafter, in *Sacred Chronology*.

The *fifth period* is as follows:

	Y.	B.C.
Temple founded, (77) *Solomon*	37	1027
Rehoboam	17	990
Abijah	3	973
Asa	41	970
Jehosaphat	25	929
Jehoram	8	904
Ahaziah	1	896
Q. *Athaliah*	6	895
Joah	40	889
Amaziah	29	849
[Interregnum	11]	820
	218	

	Y.	B.C.
Brought forward	218	
Uzziah, or *Azariah*	52	809
Jotham	16	757
Ahaz	16	741
Hezekiah	29	725
Manasseh	55	696
Amon	2	641
Josiah	31	639
Jehoahaz, 3m. 10d.		
Jehoiakim	11	608
Jehoiachin, 3m.		
Zedekiah	11	597
	441	586

The only alteration made here, is in rejecting *Solomon's* spurious reign of 80 years, foisted into the present text of *Josephus*, Ant. 8, 7, 8. in opposition to Scripture, (which *Josephus* accurately follows in all the other reigns) and inconsistently with his own system. The insertion of the 11 years interregnum between *Amaziah* and *Uzziah* is warranted by Scripture, from the cor-

respondences in the reigns of the kings of *Judah* and *Israel*, 2 Kings xiv. 1, 2; and xv. 1; and is also necessary to fill up the outline of his period. It also furnishes an additional instance of his great skill in adjusting this period of his chronology; the greatest proof of which is furnished by another genuine date of 240 years, critically expressing that most perplexed and complicated period of the reigns of the kings of *Israel*, exclusive of two interregnums of 22 years and 10 years, amounting in the whole to 272 years current, or 271 years complete, as will be proved in the course of the ensuing rectification of *Sacred Chronology*. His detail of the reigns of the kings of *Israel*, in the present text, does not in its amount correspond with this curious and admirable date, which is found detached. Ant. 9, 14, 1.

Thus does the critical conformity of these several periods, composing his whole system, with the details of the particulars included therein, furnish *demonstrative* evidence, as it seems, of the accuracy of this rectification, from the agreement of the whole with the parts throughout, and evince the necessity of these few and slight emendations of his text, without altering a single date in the general outline, and only one (*Solomon's* spurious excrescence of 40 years) in the detail.

III. It only remains to rectify a slight error in the general outline of his system, which occurs in his second period, from the deluge to *Abraham*, amounting only to 993 years, which is 9 years deficient from the correcter length of it, 1002 years.

If we look back to his list of Patriarchal genealogies, we shall find that the present text of *Josephus* assigns 120 years to *Nahor's* generation; but he probably wrote 129, for 29 was the curtailed *Hebrew* generation, to which he rightly added a century, according to his system, where the *Samaritan* and *Septuagint* only added 50 in theirs. Since then the digit was 9, in all the rest there was a sufficient precedent for its retention by *Josephus*, whereas there was none for altering it into 0. *Jackson* also corrects it to 129. And that he originally wrote 129 is proved also from its being necessary to complete the correct period 1002, to which it appears he was no stranger, from his remarkable deviation from Scripture in the interval of 12 years, which he substitutes instead of 2 years, from the deluge to the birth of *Arphaxad*. For as *Josephus* adopted the vulgar error, that *Abraham* was *Terah's* eldest son, there was a deficiency of 60 years in *Terah's* generation, (which ought to have been 130

instead of 70 years;) and these 60 years, *Josephus* most ingeniously supplied, by adding 50 years to the correct length of *Nahor's* generation, 79 years, and 10 years more to the first interval of 2 years; which *Jackson* unskilfully supposed to be a mistake of his text, and altered to 2, and thereby made his period only 992 years. Vol. I. Table, p. 66.

	Joseph.		*Correct.*
Deluge, *Shem*	12	....	2
Arphaxad	135	....	135
Salah	130	....	130
Eber	134	....	134
Phaleg	130	....	130
Ragau	130	....	132
Serug	132	....	130
Nahor	129	....	79
Terah	70	....	130
Abraham	1002		1002

This is a curious and remarkable instance, that a Chronologer may be perfectly correct in his outline, and yet incorrect in the detail, or distribution of the parts. Numerous instances might be adduced of this, drawn from the received systems of Chronology.

This rectification of the outline of *Josephus* raises his date of the Creation 5402 years before the Vulgar Era, to 5411.

This same rectified date, B.C. 5411, is verified also by its conformity with the rectified date furnished by *Theophilus*, who, according to *Abulfaragi*, p. 62, reckoned 5197 years from the Creation to the Era of the *Seleucidæ*, B.C. 312, which, added thereto, gives the date of the Creation, B.C. 5509. But this number requires a double correction: for, 1. *Theophilus* reckoned *Adam's* generation to *Seth*, 330 years, (p. 92) or a century too long; which being deducted, reduces it to B.C. 5409: And, 2. He omitted the *two* years from the deluge to the birth of *Arphaxad;* (p. 92,) which being added, we have the same rectified date, B.C. 5411, as before.

Thus have I endeavoured, and I trust not unsuccessfully, to vindicate the character of this illustrious Historian, profound Antiquary, and consummate Chronologer, *Josephus*, and to retrieve the integrity of his admirable system, by shewing its consistency throughout, both in the whole, and in the parts; thereby

furnishing a solid foundation for a durable system of Ancient Chronology, sacred and profane, built upon the rectified Era of the Creation, B.C. 5411, now first deduced from the writings of two great luminaries of the *Jewish* and *Christian* Churches, JOSEPHUS and THEOPHILUS.

It is rather a curious circumstance, that by a compensation of errors, taking B.C. 5300, the mean, between the extreme opinions of *Alphonsus*, B.C. 6984, and Rabbi *Lipman*, B.C. 3616, in the first list of this Introduction, it differs not much from the corrected Era, B.C. 5411, which, though its critical accuracy, from the nature of the subject, and the omission of the odd months, weeks, and days, of the years of the generations and reigns by which it was computed (according to the remark of *Theophilus*) cannot be strictly demonstrated, yet that it approximates nearer to THE TRUTH than any *Epoch of the Creation* hitherto proposed, may be asserted with confidence.

III. ELEMENTS

OF

ANCIENT GEOGRAPHY.

The Earth is THE LORD'S, *and the fullness thereof,*
The World, and they that dwell therein:
For HE *hath founded it upon the seas,*
And established it upon the floods.

Psalm xxiv.

III. ELEMENTS

OF

ANCIENT GEOGRAPHY.

INTRODUCTION.

In every *Historical* transaction, the circumstances of *Time* and *Place* are essentially combined, and cannot be separated in fact, however distinct in theory. To determine the former, is the proper business of *Chronology*; to determine the latter, of *Geography*; and these joint handmaids to History are both indispensably requisite to its scientific study. Having, therefore, already given the Elements of *Technical* and *Historical Chronology*, I now proceed to give a sketch of the Elements of *Ancient Geography*, so far as connected therewith.

The necessity for this arises from the imperfection and the incorrectness of the elementary treatises in use. Of these, the best, perhaps, is *Well's Historical Geography of the* Old Testament, in three volumes, octavo *. This work contains a great deal of excellent matter, well arranged, and many curious observations of modern travellers, respecting the ancient and modern state of the Holy Land, and of the other countries recorded in Scripture. But since his time, many mistakes have been corrected, and much new and important information conveyed by subsequent travellers, *Bruce*, *Niebuhr*, &c. and by later geographers, especially Major *Rennel*, in his valuable work on the *Geography of Herodotus*. Much also still remains to be

* This useful work has been reprinted at the *Clarendon* press, Oxford, 1801, in two volumes, octavo, with improved maps.

X 2

gleaned from former travellers, *Chardin*, *Sandys*, *Maundrel*, *Thevenot*, *Shaw*, *Pococke*, &c. more carefully examined; and not a little from the vast fund of miscellaneous information scattered through the *Asiatic Researches*, and other periodical publications, and the works of the learned in general; *Bryant* on the Plagues of Egypt; Bishop *Clayton's* Delineation of the Route of the *Israelites* in the Wilderness of *Arabia Petræa*, &c.; Mr. *Howard's* Thoughts on *the Structure of the Earth*, &c. From all which, the present Elementary Treatise has been compiled, with as much attention as possible to compression of matter and clearness of arrangement.

As *Ancient Geography* forms also one of the principal fastnesses of Infidelity at the present day, the objections of infidels, and the doubts of sceptics, respecting some very important points, are fully canvassed; and more *philosophical*, perhaps, as well as more *Scriptural*, solutions here proposed, of difficulties affecting the *Mosaical* account of the *Creation*, the garden of *Eden*, the *Deluge*, the *varieties of Mankind*, the passage of the *Red Sea*, the stations of the *Israelites* in the wilderness, the topography of *Jerusalem*, and its environs, &c. than have hitherto appeared.



CREATION OF THE WORLD.

Where wast thou when I laid the foundation of the earth?
Declare, if thou hast understanding.
Who laid the measures thereof, if thou knowest?
Or who stretched the line upon it?
Whereupon were its foundations fastened?
Or who laid the corner-stone thereof?
When the *Morning Stars* sang together,
And all *the sons of God* shouted for joy.—JOB.

THE *Mosaical* account of the Creation of the World is distinguished for its simplicity and perspicuity above all the cosmogonies of the *Romans*, *Greeks*, *Phœnicians*, *Egyptians*, and *Chinese*, which still, however, tend to confirm and verify it in the leading circumstances.

The venerable author relates the creation of all visible matter, and formation of "the heavens and the earth, and all the host of them,"—the earth, sun, moon, and stars,—in the order in

which they were severally produced by Divine agency; but he does not attempt to inform us of the mode of operation by which the whole was accomplished. He states the simple facts, either as truths immediately revealed by God, or handed down by authentic tradition: which tradition must have been ultimately derived from Divine revelation, communicated either to our first parents, *Adam* and *Eve*, or to their pious descendants, *Enoch*, *Noah*, &c. For it is absolutely impossible, that human sagacity could have developed mysteries beyond the reach of mortal ken:

> For man to tell *how* human life began,
> Is hard, for who himself beginning knew?—*Milton.*

And man's utter ignorance of the original process of creation, is finely expressed in the foregoing passage of the early patriarch *Job*, who probably flourished in the seventh generation after the deluge, many centuries before the birth of *Moses*, but who speaks of the divine agency as a well-known fact, universally acknowledged at that time.

To instruct or reform mankind, when, in process of time, they had mistaken, or were prone to mistake, *the creature* for THE CREATOR, the venerable author, in the first instance, informs them, that "In the beginning, GOD created *the heavens* and *the earth.*" Gen. i. 1.

Here, the sacred historian, in opposition to false and atheistical philosophy, teaches the true origin of things. He declares, that the world was not eternal, but had a *beginning;* that it was *created*, or its primitive elements produced, out of nothing; contrary to the maxim, *ex nihilo nihil fit*, which cannot controul OMNIPOTENCE, to whom the creation of passive senseless matter, and of active intelligent spirit, are both equally easy; and that it was not, as idly and absurdly asserted, made by *chance*, or a fortuitous concourse of atoms, or elementary pre-existent particles, but created by GOD, or THE LORD OF GODS, Gen. ii. 4; "who created all things by JESUS CHRIST," Ephes. iii. 9; "the Original WORD," or "ORACLE OF GOD," "by whom all things were made, and without whom was not any thing made that hath been." John i. 1, 2; Rev. xix. 13.

This appears to be the proper sense of *creating*, as distinguished from the subsequent acts of *forming* and *making*, which are also noticed, Gen. i. 7—31; ii. 3—7. They are all united

in that sublime passage of *Isaiah*, where God, speaking of the *regenerate* in the latter days, "who should be called by his name," declares, "For my glory, I have *created* him, I have *formed* him, yea, I have *made* him." Isaiah xliii. 7. And we are taught, that there was no such thing as eternal and self-existent matter; for "by faith we understand, that (*τους αιωνας*) *the worlds* were framed by THE WORD OF GOD, to the end that (*τα βλεπομενα*) the things which are seen [or the visible creation] might not [seem] to have been (*εκ φαινομενων*) of apparent [materials.]" Heb. xi. 3.

"*The heavens* and *the earth*," whose elements were then created, seem primarily to denote this globe, and its atmosphere; for the *expanse*, or "*firmament*," is expressly called "*heaven*," or rather "*the heavens*," Gen. i. 8; and evidently denotes *the sky*. Verses 14 and 20.

"And the *earth*," at its first creation, "was without form," and waste; or, as *Ovid* not improperly expresses it—*rudis indigestaque moles*—"and darkness was upon the face of the *abyss*," or *chaos* *, as it was called, in the Greek Cosmogonies. Gen. i. 2.

The formation of the earth is next described: "And THE SPIRIT OF GOD moved upon the face of the waters." Verse 2.

The Spirit of God, in this place, cannot denote, with the Arabic version, "the winds of God;" or with Dr. *Geddes*, and others, "a mighty wind blowing upon the face of the waters;" for neither *air* nor *wind* were yet in existence. It must, therefore, denote THE HOLY SPIRIT.

The kind of motion, implied in the original, elsewhere denotes the *fluttering* of an eagle over its nestlings, (Deut. xxxii. 11.) or a gentle tremulous motion. Hence seems to have arisen that fiction of heathen mythology, that the world was produced from an *egg* by incubation. *Milton* has finely paraphrased the passage, taking also the descent of THE HOLY SPIRIT on Jesus at his baptism into consideration. Luke iii. 22.

* *Ovid* describes *Chaos* in the following beautiful lines:—

Me *Chaos* antiqui (nam res sum prisca) vocabant.
Aspice quam longi temporis acta canam.
Lucidus hic *Aer*, et quæ tria corpora restant,
Ignis, *Aquæ*, *Tellus*, unus acervus erant.
Quicquid ubique vides, *cœlum*, *mare*, *nubila*, *tellus*,
Omnia sunt nostra clausa patentque manu.
Fast. Lib. I. Sect. 4.

> —————— "THOU, from the first,
> Wast present; and with mighty wings outspread,
> *Dove-like* sat'st brooding o'er the vast abyss,
> And mad'st it pregnant."

By his impulsive energy, various motions were now probably impressed on inert matter. 1. Motion of *rotation* around the earth's axis in 24 hours, at which time began the vicissitude of day and night. And perhaps, 2. Motion of *revolution* in its annual orbit, by a *projectile* force impressed. 3. The particles of matter were now probably indued with the active principles of *cohesion*, *attraction*, *gravitation*, and *repulsion*, whence arose precipitation of the denser substances towards the centre, and elevation of the rarer towards the surface of the globe, which consequently became covered with "*waters*," or a fluid mass, which the heathen cosmogonists called Μωτ, and Ιλυς, "*mud*."

From this mass, the several elements of *Light*, *Air*, *Water*, and *Earth*, were extricated in succession by the divine command, issued to THE SPIRIT OF GOD, to whom the preceding operation was ascribed; and perhaps to the attendant *angels*, or "ministering spirits," who might also have been engaged in the process of creation; called by *Job* "the *morning stars*," and "*the sons of God*," who "sang together, and shouted for joy," when the world was finished. Job xxxviii. 7. The former, and perhaps both, seem to be included in the plural expression afterwards, "Let *us* make man in *our* image," &c. Gen. i. 26. Compare Gen. iii. 22; xi. 7. And the joint ministry of angels is especially recorded at the visitation of *Sodom*, Gen. xviii. 1—22; xix. 1—24; at the delivery of the Law on *Sinai*, Deut. xxxiii. 2; and at the nativity of CHRIST, Luke ii. 13—15.

The first, *Light*, or elementary *fire*, such as is produced by *electricity*, and is a component principle of all bodies, was next called forth by the Divine Oracle*—"*Let there be light;*" and this concluded the work of "the *first day;*" which was equal in length to the *evening* and *morning*, or to an entire rotation of the earth in 24 hours; for the sun had not yet appeared to discriminate them. Verses 4, 5.

* By THE WORD OF THE LORD were the heavens made;
And all their host by the breath of his mouth.
He gathered the waters of the sea together as a heap;
He laid up the deep in storehouses.—
He spake, and it was done;
He commanded, and it stood fast. *Psalm* xxxiii. 6—9.

The second day was employed in the production of the second element, *Air*, in obedience also to the divine oracle, or command. Of this was formed the *atmosphere*, to be a receptacle for the clouds or watery vapours, now rarified by heat, for now "a *mist* began to arise from the earth." Gen. ii. 6. This atmosphere, in the original, is called "*the expanse*," by the Septuagint, *στερεωμα*, or "*firmament*," by the Vulgate and our translation, as supporting the clouds. Thus were "the waters divided from the waters," or the terrestrial separated from the atmospheric waters. Verses 6—8.

The third day was employed, first in the separation of the two remaining elements of *Water* and *Earth*. After the separation of the atmospheric waters, diminishing the mass of the terrestrial, the latter, which still covered the whole surface of the globe, and still "stood above the primitive mountains," now retired beneath the surface also, into "*the fountains of the great abyss*," or spacious caverns in the bowels of the earth, the divine "*storehouses*" prepared for their reception, until they were called forth again at the deluge. Gen. vii. 11. At length, the superficial waters subsided, or sunk to their proper level, and "the waters under the firmament," or the superficial waters, "were gathered together into one place;" the ocean and its "seas;" "and the dry land appeared," or the earth, its continents, and islands, emerged. Verses 9, 10.

The remainder of this day was employed in furnishing the land, now become dry, with *grass*, *herbs*, *vegetables*, and *fruit-trees*, for the use of the animal creation. Verses 11—13.

The fourth day was employed in making two great luminaries, the *sun* and *moon*, and the *stars* also, to "rule the day, and rule the night," and to be for "*signs* and for *seasons*, and for *days*, and for *years*." Vers. 14—18.

This passage strikes at the root of the earliest species of idolatry, the *Zabian*, or adoration of the heavenly host, into which the *Assyrians*, *Egyptians*, &c. soon fell, by shewing, that these glorious luminaries themselves were the workmanship of God, and the instruments of his providential government.

Though the sun, moon, and stars, were "*made*" on the fourth day, it is not said that they were then "*created*." They might have been created along with the heavens and the earth in the beginning, and by similar processes in them also, made fit for their respective uses; their atmospheres becoming luminous by

the separation of their elements, as that of the earth was not sufficiently depurated and transparent, until the fourth day, to receive their light, or to enable them "to give light upon the earth." Indeed, it is highly probable, that "the sun, moon, and stars," or planets and comets, which compose our immediate system, were all created and made at the same time with our "heavens and earth." This may reasonably be inferred from the admirable correspondence and symmetry of the parts with the whole, in the densities and distances of the several planets from the sun, and from each other, and in the nice adjustment of their projectile forces or velocities, and of their directions, with their perpetual attractions towards the sun and each other, in proportion to their masses, and in the inverse duplicate ratio of their distances, bending their several courses into elliptical orbits round the sun, placed in their common focus. To this we may add, the comparative smallness of the Earth, in respect of the Sun, and the superior planets, *Jupiter* and *Saturn;* whence the earth may rather be considered as an appendage to them, than they to the earth; and the sun, the common centre of attraction, the prime work of creation.

Whether "the host" of the fixed stars were all "created and made" at the same time with our system, may reasonably be doubted. For though all these had *a beginning*, unquestionably, it is no where explicitly stated in Scripture that they had *the same beginning;* and the first philosophy, in the days of *Job*, plainly intimates, that "*the morning stars*" (by a beautiful figure representing the angels of light) were prior to that creation which they celebrated with hymns of joy. Modern telescopic discoveries, as they have augmented the number of stars that are invisible to the naked eye, immensely, leading us to conclude that there are infinite numbers far beyond our ken, utterly undiscoverable; so they demonstrate the immense distances even of the largest and nearest; and lead us also to conclude, that these can be no other than *suns*, shining with native light, and, from analogy, attended with suitable trains of planets, furnished like ours, with inhabitants adapted to each, compared with which our whole system shrinks into insignificance. Is it then to be imagined for a moment, that the whole "spangled heavens, a shining frame," were called into existence merely "to give light upon the earth," which would be absolutely invisible from the nearest? or that the universe, which is found to be in-

finite or boundless, was not created until so lately as seven or eight thousand years ago?

On the contrary, the most accurate catalogues of the fixed stars, that have been made from the days of *Hipparchus* to *Herschel*, evince, that old stars frequently disappear, and new stars appear in the heavens. And if, as revelation assures us, this earth, which had a beginning, will also have an end, and as it was formerly destroyed by water, so it shall be finally consumed by fire; we may safely conclude, that the amazing process of creating and annihilating worlds has been carrying on, and will continue, through all eternity, according to the will of the SUPREME CREATOR AND GOVERNOR OF THE UNIVERSE, who "*neither slumbers nor sleeps*," and whose ETERNAL SON hath declared, "*My Father worketh hitherto, and I work!*"

The process of inanimate creation having been completed in the first four days, and the earth fitted for the reception and nourishment of animals, the fifth day commences with the production of *fishes* and *birds* in succession, beginning with the lower classes in the scale of intelligence, and gradually rising to the highest. Vers. 20—23.

Here it is remarkable, that the term "*created*," which had been discontinued from the first verse, is now resumed, and, with strict propriety, applied to the production of *life*, or the living principle, in animals, which is evidently distinct from, and higher than, inanimate matter, and must therefore be attached to the organized bodies of animals by the *power* of GOD. Hence is refuted the senseless and "crazy wisdom" of the *Epicureans*, and other ancient *Materialists*, idly supposing that animals were hatched in the slime of the earth by the heat of the sun *.

It is also remarkable, that the divine *blessing* was solemnly pronounced on these animal tribes, and extended, we may presume, to the higher, commanding them to "*be fruitful and multiply*." Thus intimating, that the propagation of animals was not owing to any inherent principles of generation in their natures, but that "children and the fruit of the womb are a heritage and *gift* that cometh of THE LORD." To impregnate

* Cum *prorepserunt* primis *Animalia* terris,
Mutum et *turpe pecus* [*hominum*], &c.—HOR. Sat. 1, 3, 98.

Even the *Athenians* boasted that they were Αυτοχθονες, "sprung from *the soil itself*."

the fœtus, or embryo animal, "*a quickening spirit*" is indispensably necessary.

The sixth day was employed in creating the various classes of land animals; *cattle* of the tame kinds, *beasts* of the wild, and all the *reptile* tribes that creep along the ground; and, last of all, the highest and noblest, *Man*. Vers. 26—30.

The creation of man is described with peculiar solemnity; 1. "He was made in the *image* and *likeness* of GOD;" invested with *reason* and *speech* *; indued with the *knowledge* of his CREATOR, and made an *heir of immortality*, not like "the beasts that perish." 2. He was invested with *dominion* † over all the animal tribes, the vegetables, and the earth itself. 3. Whereas all other animals were created "after their kinds," the sex of the human species is particularised: "*Male* and *female*

* The ancient and modern professors of *Atheistical* philosophy, *Lucretius*, *Horace*, *Rousseau*, *Herder*, *Monboddo*, &c. represent the faculty of articulate speech, or language, as the mere *instinctive* expression of the wants and desires of a herd of associated savages,—*mutum* et *turpe pecus*—gradually invented for mutual convenience of communication, and established by mutual consent.

> "At varios linguæ sonitus *Natura* subegit
> Mittere, et *Utilitas* expressit nomina rerum."—LUCRET. 5, 1027.

But our great Lexicographer justly remarks, that "*Language* must have come by INSPIRATION: a thousand, nay a million of *children*, could not invent a language; while the organs are pliable there is not understanding enough to form a language; and *by the time* that there is understanding enough, the organs are grown stiff. We know that *after a certain age*, we cannot learn a language." *Boswell's* Life of *Johnson*.

This is confirmed by experience: *Alexander Selkirk*, when cast away on the desert island of *Juan Fernandez*, almost lost the use of his native tongue, after some years residence. The young savage, called *Peter*, caught in the woods of *Hanover*, several years ago, though soon tamed, and reconciled to society, never could be taught to speak.

And lately, the young savage of *Aveyron*, in *France*, though put under the care of the celebrated *Sicard*, master of the deaf and dumb school, has never yet been observed to utter an articulate sound, not even to express his most urgent wants. After spending a month in the hospital of *St. Afrique*, he did not advance one step towards civilization, and is still as far removed from the manners and habits of social life, as when he was first discovered in the woods. Nothing can console him for the loss of his liberty, and original mode of living, and he is always anxious to run away. He was about twelve years of age when taken.

How piously and correctly has *Ovid* expressed the truth:—

> Quod *loquor* et *spiro*, cœlumque et lumina solis,
> *Aspicio.*————Possumne *ingratus* et *immemor* esse!—
> [DEUS] ipse dedit.

It is remarkable, that *Adam* was indued with the faculty of speech in his *solitary* state, and gave *names* to the *animal* tribes before the formation of *Eve*. Gen. ii.

† Finxit in *effigiem moderantûm cuncta* DEORUM.—*Ovid.*

created He them." And this, by a distinct formation of the woman out of the man. The separate process of both is described in the second chapter, not to interrupt the general account of the creation in the first.

The seventh day, on which God *rested*, or ceased from all his work, which he *created* and *made*, was *blessed*, as a gracious *sabbath*, or day of rest, repose and relaxation from labour to mankind, and the cattle employed in their service. It was also "*sanctified*," or consecrated, by the divine command, to the higher duties of religious worship and instruction.

PARADISE.

The situation of *Paradise*, "the garden" of *Eden*, or "delight," in which our first parents, *Adam* and *Eve*, were placed by their Creator, to keep it in order, is perhaps one of the most disputed points of Ancient Geography. It has been sought for in every quarter of the globe. Widely different indeed, are the sites assigned to it by ancient and modern Geographers: *Armenia, Babylonia, Syria, Palestine, Ethiopia, Tartary, Hindustan, Ceylon,* and *China;* originating from the conciseness of the Mosaical Account. Gen. ii. 8—15.

"And the Lord God planted a garden eastward in *Eden.*—— And a river issued from Eden to water the garden. And from thence it was parted, and became into four heads. The name of the first is *Pison;* that is it which compasseth the whole land of *Havilah*, where there is gold; and the gold of that land is good: there is *(bdolah)* bdellium, and *(Shoham)* the onyx stone. And the name of the second river is *Gihon;* the same is it which compasseth the whole land of *(Cush) Ethiopia.* And the name of the third river is *Hiddekel;* that is it which goeth before * *(Assur) Assyria.* And the fourth river is *(the Phrat) Euphrates.*"

This account obviously intimates that the garden was watered by a river that ran into it from the adjacent country of *Eden;* and there probably formed a reservoir or lake: from which issued in different channels and directions, the heads, begin-

* This is the judicious rendering of the Septuagint Version, κατεναντι Ασσυριων, followed by the Latin Vulgate, *Contra Assyriam*, and by the Syriac; though קדמת, *Kedemath*, in general signifies "*eastward.*"

nings *, or sources of four rivers. Of these rivers the last is simply mentioned, *the Phrat*, as being the well known river *Euphrates*, encompassing *Mesopotamia;* the *Hiddekel*, *Diglath*, or *Tigris*, is ascertained by its bounding *Assyria* on the western side; but the two other rivers have never yet been determined, from the uncertainty of the countries, *Havilah* and *Cush*, and of the productions, *Bdolah*, and *Shoham;* which are differently interpreted according to the different countries to which they are supposed to belong: the former being variously rendered *bdellium*, (a bitter gum,) the *carbuncle*, *loadstone*, *oleaster*, *crystal* or *pearl;* the latter, the *beryl*, and the *emerald*, with perhaps as little propriety as the *onyx stone*, which is condemned by Bochart.

The Jewish Historian *Josephus*, blending oriental fables with Scripture, placed the land of *Havilah* in *India*, and *Ethiopia* in *Africa;* and thence supposed that the river *Pison* divided the *Ganges*, and the *Gihon* the *Nile*. Still admitting that the *Diglath* denoted the *Tigris;* and the *Phorath* the *Euphrates*. Ant. 1, 1, 3.

In order to account for the appearances of the *Pison* and of the *Gihon*, at such immense distances from their sources, some of the early Christian fathers, *Theophilus* of *Antioch*, *Theodoret*, *Philostorgius*, and *Severianus*, and Rabbi *Moses bar Cephas*, imagined that they ran in subterraneous channels; and the latter river, even under the bed of the Ocean, before their emergence, as the *Ganges* and the *Nile!* *Hudson's* note on *Josephus*, ibid.

Mr. *Wilford* transfers *Eden* and all the Rivers to *India*, following the tradition of the *Hindus*, and supposes the river *Pison* to be the *Neilab*, *Sindus*, or *little Indus;* the *Gihon*, the *Haomund;* the *Hiddekel*, the *Bahlac*, and the *Perath* the *Cunduz*. *Asiat. Research*. Vol. VI. But this hypothesis is utterly inconsistent with the courses of the *Euphrates* and *Tigris*, whose " *heads*" or sources are known to lie in *Armenia*. The third and prevailing hypothesis, invented by *Calvin*, and adopted by *Morinus*, *Bochart*, *Huetius*, *Wells*, *Shuckford*, &c. and also in the first edition of this work, is, that the Garden of *Eden* was placed upon the confluence of the *Euphrates* and *Tigris*, in a common channel, two days journey above *Bassorah*, and extending as far as their separation again, about five leagues

* τας αρχας, the Septuagint rendering.

below it. Consequently the four rivers of Paradise described by *Moses*, were two, above the junction, namely the *Euphrates* and *Tigris;* and two below the separation, the *Pison* and *Gihon*. And to accommodate this hypothesis to the *Mosaic* account, the land of *Eden* is found in *Thelassar*, Isa. xxxvii. 12, near the Persian Gulph, and the embouchure of these rivers, corresponding to the *Adin* and *Talatha* of *Ptolomy*, and the ancient Geographers. *Havilah* compassed by the *Pison*, is supposed to denote the eastern part of *Arabia Petræa*, as contrasted with *Shur*, the western, at the head of the red sea, or isthmus of *Suez*, from 1 Sam. xv. 7; and *Cush*, encompassed by the *Gihon*, the Asiatic *Ethiopia*, called *Susiana* by the Greeks, and *Chusistan*, "the land of *Cush*," by modern Geographers. See *Wells's Sacred Geography*, Vol. I. Chap. 1.

But this hypothesis appears to be untenable in every point.

1. The land of *Eden*, whence issued the river that watered the *Garden*, must have been in the neighbourhood of the *heads*, or springs of the principal rivers, the *Euphrates* and *Tigris*, and not near their *endings*, at the sea. And *Eden* is a general term, signifying "delightful," or "pleasant," and was applied to other countries also; to a place in the land of *Syria*, Amos i. 5; to a town in *Cilicia*, and to a port in *Arabia felix*, as being situate in a delightful country, &c.

2. The two upper Rivers, the *Euphrates* and *Tigris*, cannot, with any shadow of propriety, be said to have had their "*heads*," or their "*beginnings*," at their junction, when they ended as distinct rivers; nor were the lower, *Pison* and *Gihon*, any other than merely the continuation of the former, after their separation.

3. The *Pison* was said to "encompass," or skirt for a considerable length, the land of *Havilah*, and the *Gihon*, the land of *Cush*; but their course, after their separation below *Bassorah*, is not above eighteen leagues distant from the place where these two branches fall into the sea; according to *Thevenot* and *Texeira*. Univers. Hist. Vol. I. Chap. 1. They can be said, therefore, only to wash a *corner* of these countries, not to encompass them.

4. The junction of the *Euphrates* and *Tigris*, above *Bassorah*, at present, did not take place till after the time of Alexander the Great, B.C. 330—before which the *Euphrates* and *Tigris* ran in separate channels, from their sources to the sea. This appears from the testimony of *Herodotus*, and the voyage of *Nearchus*.

See *Rennel's* Geography of Herodotus, p. 201. The hypothesis, therefore, built upon their ancient junction, falls to the ground.

5. The land of *Havilah,* watered by the *Pison,* could not possibly be the eastern part of *Arabia,* as collected from 1 Sam. xv. 7; because the *Havilah* where *Saul* smote the Amalekites unto *Shur,* was evidently the land of *Amalek,* bordering upon Judea, and also upon the western part of *Arabia Petræa,* near the wilderness of *Sin,* Exod. xvii. 8. And, consequently, about a *thousand* miles distant from the *Euphrates,* according to the judicious remark of *Faber,* Origin of Pagan Idolatry, I. p. 303.

6. If the confluent waters of the mighty rivers *Tigris* and *Euphrates,* ran through the *middle* of the Garden, according to this hypothesis, how could *Adam* have free access to all parts of the Garden? as plainly intimated, Gen. ii. 16. And if to avoid this objection, the garden be placed with *Shuckford,* on the *Eastern* bank, it contradicts Scripture.

Rejecting the foregoing hypothesis, it remains, therefore, that we look for the land and Garden of *Eden,* somewhere near the springs of the *Euphrates* and *Tigris,* and for the springs of the *Pison* and *Gihon* somewhere in their neighbourhood, with the judicious *Reland, Faber,* &c.

" The *Armenian* mountains rise very suddenly from the *north,* and from the elevated level, the highest of western *Asia,* whence the *Euphrates,* the *Araxes,* and the *Cyrus,* spring at no great distance from the *Euxine* sea."——The " *Euphrates* and *Tigris* spring from opposite sides of Mount *Taurus* in *Armenia;* the former, from its upper level, northward; the latter, from its southern declivity: and certain of the sources of the two rivers are only separated by the summits of *Taurus.* And yet, notwithstanding this vicinity, the sources of the *Tigris,* by being in a southern exposure, where the snow melts much earlier than at the back of the mountain, and in a more elevated situation, occasion the periodical swelling of this river to happen *many weeks earlier* than those of the *Euphrates.* Of the two, the *Tigris* seems to be the largest body of water." *Rennel, Geography of Herodotus,* pp. 177, 201, 282.

This is beautifully illustrated by the son of *Sirach,* who seems to have been well acquainted with the situation of the four rivers of Paradise.

" God filleth all things with his wisdom, as *Pison* and as *Tigris* in the time of the *new fruits.* He maketh the under-

standing abound, like *Euphrates* and like *Jordan* in the time of *harvest.* He maketh the doctrine of knowledge appear as the light, and as *Gihon* in the time of *vintage.*" Ecclus. xxiv. 25, 26.

The *Pison* has been supposed to be the *Phasis,* from the resemblance of the names. But the true *Phasis* rises in the northern range of *Caucasus,* between the *Euxine* and *Caspian* seas, at too great a distance from the heads of *Euphrates* and *Tigris.* For this, *Faber* substitutes the *Absarus* of Pliny, or *Batoum* of modern geographers, which rises in *Armenia,* and runs into the *Euxine* sea. *Origin of Pagan Idolatry,* I. p. 303. But its course, by his map of *Eden,* appears too short to encompass the *whole* land of *Havilah,* supposing, with him, *Havilah* to denote *Colchis,* which was famed, in ancient times, for the abundance and excellence of its gold; as *Strabo, Appian, Eustathius,* and *Pliny* all attest.

The *Araxes* seems to have a better claim, which rising in *Armenia,* runs by a more circuitous course into the *Caspian* sea, skirting the countries of *Colchis* and *Georgia,* which lie between the two seas, and might both have constituted the land of *Havilah.*

The *Gihon* has also been supposed to be the ancient *Gyndes,* from the resemblance of the names. This river, the modern *Diala,* lies eastward of the *Tigris,* and, according to *Herodotus,* rises in the mountains of *Matiene,* bordering on *Armenia,* and runs through the country of the *Darneans,* in its way to join the *Tigris.* B. I. §. 189. The country which it waters is supposed to be *Chusistan,* by *Faber.* I. p. 306. But Major *Rennel* suspects that the *Gyndes,* divided into three hundred and sixty channels by *Cyrus,* was rather the river *Mendeli,* which descends from the quarter of Mount *Zagros,* and passes by the country of *Derne,* probably the *Darnea,* of *Herodotus. D'Anville* supposes the river *Dainawar* to be meant, whose waters descend to *Susiana. Rennel,* &c. p. 202.

But notwithstanding the uncertainty attached to the rivers *Pison* and *Gihon* at present, which is not likely to be removed, the hypothesis which places the Garden of Eden near the springs of the *Euphrates* and *Tigris,* in the elevated region of *Armenia,* is infinitely preferable to the rest. And it is supported by the high *geographical* authority of our sublime and deep-learned poet, *Milton,* in his *Paradise Lost.* When *Satan,* escaping from

Pandemonium, applied to the archangel *Uriel*, stationed in the sun, to inform him of the way to the newly-created Earth, and to the abode of man, *Uriel* shewed him the globe of the earth, and pointed to the spot where Paradise lay; in consequence of which, *Satan*, following the course of the ecliptic, lights on "*Niphates*' snowy top," "the *Assyrian* Mount." B. III. 654—742; IV. 126. and thence, proceeds to *Paradise*, which is described as a *hilly* region,—"with cedars crowned, above all hills," IV. 131—172; V. 260, 261; XI. 377, 378. "The *Assyrian Garden*,"—"wide remote from Mount *Amara*, in *Abyssinia*, under the *Ethiop* line, by *Nilus*' head; supposed by some to be true Paradise." *Milton* here rejecting the hypothesis of *Josephus*. IV. 280—285. And he further describes the rise and course of the river which watered the Garden, issuing from the country of *Eden*.

> "*Southward*, through *Eden*, went a *river large*,
> Nor changed his course, but through the *shaggy hill*,
> Passed underneath, *ingulphed;* for God had thrown
> That *mountain*, as his garden mound, high raised
> Upon the rapid current, which through veins
> Of porous earth, with kindly thirst updrawn,
> Rose a *fresh fountain*, and with many a rill
> Watered the Garden; thence united fell
> Down the steep glade, and met the nether flood,
> Which from his darksome passage now appears;
> And now divided into *four* main streams
> Runs diverse, wand'ring many a famous realm
> And country, whereof here needs no account."—IV. 223—235.

And that by "the *river large*" he meant the *Tigris*, appears from the parallel passage; when he describes *Satan* as getting admission into the Garden, through the subterranean course, which lay remotest from the *Cherubic* watch at the entrance.

> " ———— There was a place,
> Now not, (though sin, not time, first wrought the change)
> Where *Tigris* at the foot of Paradise,
> Into a *gulph* shot underground, till part
> Rose up a *fountain*, by the tree of life.
> In with the river sank, and with it rose
> *Satan*, involved in rising mist; then sought
> Where to lie hid:"———— IX. 69—72.

Milton has here adopted, and applied to his own purpose, with admirable learning and ingenuity, *Pliny's* account of the *Tigris*. B. VI. 27. *Pliny* represents the *Tigris* as rising in the region of *Armenia Major*, from a spring in a remarkable

plain, called *Elongosine.* It runs through the lake *Arethusa,* and meeting with Mount *Taurus,* buries itself underground, and rises again on the other side of the mountain," which *Strabo* mistook for its first rise. Lib. XI. p. 363.

And if we attend to the accounts of modern travellers, there is no country that more strongly resembles the terrestrial paradise than the delightful region of *Armenia* and *Georgia.* It is thus described in the memoir of a map of the countries between the *Black Sea* and the *Caspian.* P. 46.

" The whole country is so extremely beautiful, that *fanciful* travellers have imagined that they found here the situation of the original garden of *Eden.* The hills are covered with forests of oak, ash, beach, chesnuts, walnuts, and elms, encircled with vines, growing perfectly wild, but producing vast quantities of grapes. From these is annually made as much wine as is necessary for the yearly consumption; the remainder are left to rot upon the vines. Cotton grows spontaneously, as well as the finest European fruit-trees. Rice, wheat, millet, hemp, and flax, are raised on the plains, almost without culture. The valleys afford the finest pasturage in the world; the rivers are full of fish; the mountains abound in minerals: and the climate is delicious; so that Nature appears to have lavished on this favoured country, every production that can contribute to the happiness of its inhabitants."

These travellers may be deemed "*fanciful,*" rather for not adducing arguments in support of their opinion, than for their opinion itself, as justly observed by *Faber*, Vol. I. p. 300.

See also *Tournefort's* similar description of the country of the *Three Churches,* at the foot of Mount *Ararat,* in the following article of the *Residence of Noah's Family.*

THE UNIVERSAL DELUGE.

When the universal degeneracy and corruption of the primitive world had come to its height, in the tenth generation from *Adam,* so that only " *Noah* walked with God, and was found perfect in his generation," God destroyed them all by the waters of a deluge, except *Noah* and his family, consisting of his wife, his three sons, *Japhet, Shem,* and *Ham,* with their wives, eight persons in all; who were miraculously preserved in an ark built according to the divine command and model.

1. " The wood," of which the ark was built, was called " *go-*

phar," probably *cypress;* for the radical part of the Greek *κυπαρισσος*, namely, *kupar*, by an easy interchange of kindred letters, may be derived from the Hebrew.

2. The dimensions of the ark were 300 cubits in length, 50 in breadth, and 30 in height, and it consisted of three stories or floors. Reckoning the cubit at 18 inches, it will be found that it must have been of the burden of 42,413 tons. A first rate man of war is between 2200 and 2300 tons; and consequently, the ark had the capacity or stowage of 18 of such ships, the largest in present use, and might carry 20,000 men, with provisions for six months, besides the weight of 1800 cannons, and of all military stores. It was then by much the largest ship ever built. Can we doubt of its being sufficient to contain eight persons, and about 200 or 250 pair of four-footed animals? a number to which, according to Mr. *Buffon*, all the various distinct species may be reduced, together with all the subsistence necessary for a twelvemonth?

3. The time employed in building the ark was 120 years; as collected from Gen. vi. 3; 1 Pet. iii. 20. And when it was finished, *Noah* and his family, and all the animals to be preserved, assembled in pairs, male and female, by the divine command, and in the course of a week entered into the ark. And when they were all entered, " THE LORD *shut him in,*" or effectually closed the outside of the ark *.

And now the deluge began, for " in the same day were *all the fountains of the great abyss broken up*, and *the windows of heaven were opened.*" The same Almighty power which originally drew off the redundancy of the waters, which covered the earth's surface, into the atmosphere, and into the subterraneous caverns, until they subsided to their proper level, now discharged them again upon the earth, until it was entirely covered with the waters of the deluge.

The continuance of the rain was " forty days and nights," or forty entire days, until the atmosphere was drained of its waters; but the eruption of the subterraneous waters lasted for 150 days, until " the waters prevailed exceedingly upon the earth, and *all the high hills*, that were under the whole heavens, were covered; fifteen cubits upwards [above the highest] did the waters pre-

* This might have been necessary, not only to resist the fury of the waves, but also of the men, perhaps, who might endeavour to force a passage into the ark on the rising of the waters.

vail, and the *mountains* were covered. Gen. vii. 5—24. Words cannot more forcibly express the universality of the deluge.

From the *Mosaic* account it is evident, that there were *high hills* and *mountains* in existence before the deluge, otherwise they could not be covered thereby. And indeed the sources of *rivers*, which existed before the deluge, must have lain in such. How unscripturally, then, and how unphilosophically, do our modern geologists reason, *De Luc*, *Wallerius*, who allot not more than 50 toises, or fathoms, to the highest Antediluvian hills; or *Whitehurst*, who reduces them to as many feet! according to *Howard*, in *Thoughts on the structure of the Globe*, 1797, p. 529. This is a valuable work, well calculated, in general, to expose the reveries of modern Materialists on the subject, *Buffon*, *Bailly*, *Hutton*, &c.

De Luc, *Wallerius*, *Whitehurst*, and *Howard* himself, all suppose, that before the deluge, the earth's axis was perpendicular to the plane of the ecliptic, and that its present obliquity took place at the deluge, which occasioned an alteration of the earth's centre of gravity. *Thoughts*, &c. p. 524, 540.

But this notion is not warranted either by Scripture or Philosophy; for,

1. At the creation, the two great lights, the sun and moon, were ordained among other uses, to be for *signs* and for *seasons*, and for *days* and for *years*. Gen. i. 14. But *seasons* and *years* are produced by this obliquity, as acknowledged by these geologists themselves; and could not have existed on the former supposition; as is known to the meanest astronomer. If then *seasons* and *years* existed before the deluge, so must the obliquity. But that they did, is evident from the history. The duration of time from the creation to the deluge, is measured by the *years* of the generations of the patriarchs from *Adam* to *Noah*. Chap. v. The year, therefore, was an established measure of time, during that period, consisting of 360 days, or 12 months of 30 days; as appears from the rising of the waters of the deluge for 150 days, or five months, and from *Noah's* stay in the ark for a year and ten days, from the 17th of the second month till the 27th of the same.

And when God promised *Noah*, that " while the earth remained, *seed-time* and *harvest* [or *Spring* and *Autumn*] *cold* and *heat*, or *Winter* and *Summer*, and *day* and *night*, should not *cease*, Gen. viii. 22. plainly signifying, that the world should

go on after the deluge as it had done before, and that the same vicissitude of *seasons* should still prevail, as of *day* and *night;* How was it possible to represent, that "God found it necessary to *forewarn Noah*, that he must expect successive changes of seasons, and vicissitudes of heat and cold, such as he had *never yet* experienced!" *Howard*, p. 526.

2. The supposition of an alteration of the earth's centre of gravity, produced by the deluge, is gratuitous and unfounded. However considerable in themselves may be the subterraneous caverns that form the *storehouses* of the redundant waters of the globe, which principally contributed to cover the earth, and its highest mountains, yet they bear but a trifling proportion indeed to the whole mass of the earth. From calculations made at *Schehallion*, in *North Wales*, some years ago, by those eminent astronomers and mathematicians, Doctors *Maskelyne*, *Hutton*, &c. it was found, that the earth, upon an average, through its whole sphere, has twice the density of granite, or about five times that of water. Therefore it cannot be a *hollow shell*, as some have formerly supposed: nor can its internal parts be occupied either by *central* fire or water. The solid parts must greatly exceed the fluid; and the probability is, that the substances composing them grow denser, or more ponderous, the deeper they lie, or the nearer they approach to the centre. *Paley's Natural Theology*, p. 400.

To promote the recess of the waters, the Divine Power caused a "*wind*," to excite evaporation, and to repel the waters, in a contrary direction to that in which they rose. The direction of this wind was from the *North*, according to primitive tradition, preserved by *Ovid*:—

> Nubila disjecit, nimbisque *Aquilone* remotis,
> Et cœlo terras ostendit, et æthera terris.—Metam. I.

Hence we might reasonably conclude, that the main current of the waters of the deluge came from the south.

And this conclusion is strongly supported by the present appearances of the great continents of the terraqueous globe; which are such as might naturally have arisen from tremendous disruptions of "the fountains of the great abyss," principally in the higher *southern* regions; the waters issuing northwards with inconceivable fury at first, but growing less violent toward the end of their progress.

Thus, if we inspect the map of the world, the deep indentations of the southern coasts of *Asia*, *Africa*, and *America*, and the bold projecting capes of the peninsula of *Hindustan*, of *Good Hope*, and of *Horn*, with the disruptions of *Ceylon*, *Madagascar*, and of *Terra del fuego*, from the continents; the chaotic appearances of the ghauts of *Hindustan*, of the mountains of *Abyssinia* and *Caffraria*, and of those in the neighbourhood of the streights of *Magellan*, which are described by the most intelligent travellers; as if they had been torn up by the roots, turned topsy turvy, or piled upon each other in wild confusion; whereas the mountains of *Northern Asia*, *Europe*, and *North America* assume tamer aspects, and more regular forms; we have no longer room to doubt of the northerly progress of the cataracts of the deluge from high southern regions.

There are also traces of prodigious disruptions of the earth in high northern regions, as if on purpose to absorb the redundant waters from the south. In some parts, whole countries have been uplifted on one side, and half buried on the other, in vast gulphs which opened to receive them. Thus, the coasts of *Norway* are the most abrupt, and the highest known, on the ocean, rising from the level of the sea, to the height of from 300 to 900 toises or fathoms. From these, the general face of the country slopes till it meets the *Baltic*, under whose bason part of its former surface lies deep buried. In the shock of the sudden fall of such extensive tracts into the subterraneous vaults, vast fissures were opened into its uplifted parts, forming at present the most frequent, the deepest, and the narrowest creeks yet known in any part of the world. *Howard*, p. 540 *.

* In addition to this curious remark from *Howard*, the annals of *Norway* furnish an instance of a most remarkable subsidence and absorption of ground:—

"In the night of February 5, 1703, the superb family seat of *Borge*, near *Frederickstadt*, in *Norway*, was suddenly immersed into a deep abyss of a hundred fathom deep, together with every thing in it; the gap being instantly filled up by a piece of water, betwixt three or four hundred ells long, and of half the breadth. The house was doubly walled, but of these walls, as well as of several high towers, not the least trace was to be seen.—With it perished fourteen souls, and two hundred head of cattle. The Lord and Lady *Wærnsckiold*, two children, and the steward, had the good fortune providentially to save themselves. The lady, being then near her time, was attended by a midwife, who in great consternation came to tell them that the house and ground began to give way; upon which they immediately crossed the water to a seat of her lord's brother, where the lady was the very next day delivered.—*King's Morsels of Criticism*, Vol. III. p. 306.

And hence, perhaps, we may account for the remarkable redundancy of land towards the north, and of sea towards the south pole, from the uplifting of the land in the former case, and its subsiding in the latter.

The universality and northerly course, in general, of the deluge, appear to be fully established by well-attested accounts of the fossil remains of foreign animals and vegetables, found all over the globe, in places and at elevations where they could not have been naturally produced.

1. At *Port Julian*, on the eastern coast of South America, in 49 deg. south lat. Sir *John Narborough*, in 1670, found on the tops of the hills, and in the ground, very large oyster-shells, six or seven inches broad, and yet not one oyster was to be found in the harbour. They lay in veins in the earth, and in the firm rocks, and on the sides of the hills in the country. *Voyage to the Streights of Magellan*, p. 46.

2. On the *Andes*, near the western coast of South America, *Ulloa* found *bivalve shells* at the elevation of 13,869 English feet; and in the same rocks containing these, *petrified wood*, which must have been drifted thither at the same time the shells were deposited. See *Ulloa's* Memoires, &c. Acad. Paris, 1771, cited by the *Monthly Review*, May 1803, p. 73.

3. The *Alps* and *Pyrenean* mountains in Europe abound with *fossil shells*, at considerable elevations.

4. In the *Tauric* mountains of the *Crimea* are found petrifactions of *foreign shells*, not to be met with in the adjacent seas. Mrs. *Guthrie's* Travels, cited by the *Monthly Review*, November, 1803, p. 230.

5. At the mountain of St. *Peter's*, near *Maestricht*, in Germany, among other fossil remains, have been found the head of a *crocodile;* large jaw-bones and vertebræ, a thigh bone and shoulder blade of some large species of animal; *tortoise* shells; fragments of branched horns resembling those of the elk; the teeth of various species of *sharks*, and of some unknown fishes; *sea shells* of various kinds; *silicious wood*, perforated by worms, *madrepores*, and *fungites*.

Of these shells, the *Ostrea Jacobea*, whose upper valves are frequently found in the environs of *Maestricht*, and in such beautiful preservation, now haunt the Mediterranean sea; the delicate and fragile *pecten pleuronectes*, of *Lamark*, (erroneously denominated *ostrea pleuronectes* by *Linné)* now inhabits

the seas of *China* and *Japan;* and the *Echinophora digitata*, of *Rumphius*, has its abode in the *Indian* ocean. The greatest number of species, however, which are described and figured in St. *Fond's* Natural History of St. *Peter's*, are unknown. In fact, it rarely happens that beds of fossil shells contain many of the kind actually existing in the neighbourhood.

6. The same observations may be applied to the petrified skeletons of the *elephant*, *rhinoceros*, *hippopotamus*, &c. which abound in the steppes, or table lands of *Tartary* and *Siberia*. Most of the fossil *crocodiles* which have been discovered in the different parts of *Europe*, are referred by St. *Fond* to the *Gavial*, or *Asiatic* species. *Monthly Review*, September, 1803, p. 461.

7. In a gravel-pit in the parish of *Newton St. Loe*, three miles from *Bath*, in the valley adjoining the Bristol road, were found, in 1801, several fossil remains of foreign animals, now in the possession of *Jacob Wilkinson*, Esq. Among them is a great tusk, probably of a *mammouth*, which is seven feet long, and measures, at the butt, thirteen inches round; a large shoulder-blade, probably belonging to the same animal; and the petrified jaws of an *alligator*, in which the teeth are perfect, and locked in each other.

In a limestone quarry belonging to *Thomas Leir*, Esq. of *Weston*, near *Bath*, in 1807, there were found, in quarrying for stones, two *peach-stones*, in perfect preservation, and in their natural state, imbedded in a layer of soft blue clay, at the depth of twelve feet, under a solid mass of limestone. These peach-stones must have been deposited there before the growth of the limestone by which they were covered, and this to a considerable extent all around; many ages before the importation of peach trees into *England*.

8. In the year 1775, the *Russian* government sent a surveyor, *Chvoinoff*, to explore the shores of the *Icy sea*, who found, near the promontory of *Swatoi noss*, an island about 150 versts long, and 80 broad in the widest part, which was "formed," to use his own expressions, "of the bones of that extraordinary animal the *mammouth*, mixed with the heads and horns of the *buffalo*, or something like it, and some horns of the *rhinoceros*."

9. Also during the expedition for exploring the north and east coasts of *Russia*, in 1785—1794, on the high sandy shores of the river *Kovima*, which runs into the *Icy sea*, in lat. 69 deg. 16 min. were found in great abundance the tusks of the *mam-*

mouth. The largest of these, which *Sauer*, secretary to the expedition, measured, was eight feet seven inches (French) long, and at the thickest part, twenty-two inches from the root, was seventeen inches round, and weighed 115 pounds Avoirdupois. *Monthly Review*, May 1803, p. 7.

10. M. *Pallas*, who had formerly espoused the opinion of *Buffon*, that *Siberia* was once the abode of *elephants*, was convinced, by later observations, that such, whose remains are there found in considerable numbers, must either have fled to these high grounds to avoid an increasing deluge, or that their carcasses had been wafted thither by its waters. In his observations on the formation of mountains, this author says, that the relics of those large animals, inhabitants of *Hindustan*, the *elephant*, *rhinoceros*, and monstrous *buffaloes* are to be found in great quantities near the course of rivers, and *chiefly wherever there is any considerable opening* in the chain of *Oural* mountains, which bound *Siberia* on the *south*. They are deposited at no great depth, under beds of sand or slime, accompanied with various *sea-shells*, *bones of fish*, and *wood* covered with *ochre*; an evident proof that they were transported thither by water, [and that they did not travel thither by land.] A *rhinoceros*, still covered with its skin entire, found in the frozen soil of the borders of the *Viloûi*, "is a convincing proof," says he, "that it must have been *the most rapid inundation*, which could have hurried this carcase to these frozen countries, before corruption had time to destroy its tenderest parts." He adds, that according to the report of hunters, "*elephants*, and other monstrous animals, are found yet, covered with their skins, at the foot of the mountains which occupy the space between the rivers *Indighirka* and *Kolyma*." *Howard*, p. 471.

11. "A complete *mammouth* has lately been found in a state of perfect preservation on the borders of the *frozen ocean.* It was discovered by *Schoumakoff*, a *Tungoose* chief, in the autumn of 1799, in the midst of a rock of ice; but it was not till the fifth year after finding it that the ice had melted sufficiently to dis engage the mammouth, when it fell over on its side on a bank of sand. *Schoumakoff* then cut off the tusks, which he bartered for goods with a Russian merchant to the value of 50 roubles (11*l.* 6*d.*) He then left the carcase to be devoured by bears and wolves; previously to which, he had a rude drawing made of it, which represents it with pointed ears, very small eyes, horse's

hoofs, and a bristly mane extending along the whole of its back."

"In 1806, Mr. *Michael Adams*, of *Petersburgh*, hearing of the circumstance, repaired to the spot, where having arrived, he found the skeleton entire, one of the fore feet excepted, though nearly stripped of its flesh. The *vertebræ*, from the head to the os coccygis, one of the *shoulder blades*, the *pelvis*, and the remaining three extremities, were still held firmly together by the ligature of the joints, and by strips of skin and flesh. The head was covered with a dry skin. One of the ears, well preserved, was covered with a tuft of bristles. These parts could not avoid receiving some injury during their removal to *Petersburgh*, a distance of 6875 miles; the eyes, however, are preserved, and the pupil of the left eye is still distinguishable. The tip of the under lip was eaten away, and the upper being destroyed, the teeth were exposed. The brain, which was still within the cranium, appeared dry. The parts least damaged were one of the fore feet, and one of the hind: these were still covered with skin, and had the sole attached to them. According to the Tungoose chief, the animal was so corpulent and well fed, that its body hung down below the knee joints. It was a male, but had neither tail nor trunk. From the structure of the *os coccygis*, however, Mr. *Adams* is persuaded that it had a short thick tail. *Schoumakoff* always persisted in asserting that he never saw any appearance of a proboscis; and it does not appear probable that his rude draughtsman would have omitted such a striking feature, if there had been one. The skin (three-fourths of which is in the possession of Mr. Adams) was of a deep grey colour, and covered with reddish hair, and black bristles. More than 40lbs. weight of them, that had been trodden into the ground by the bears, were collected, and many of them were two feet four inches long. The head weighs 460lbs.; the two horns, each of which is nine feet and a half long, weigh 400lbs.; and the entire animal measured ten feet and a half high, by sixteen and a half long. The tusks are curved in the direction opposite to those of the elephant, bending towards the body of the animal. Mr. *Adams* adds, that he found a great quantity of *amber* on the shores."

This curious and circumstantial account, which has all the marks of veracity, is transcribed from a foreign journal by the *Christian Observer*, March, 1808, p. 198.

12. In the heart of *North America*, also, some years ago, in a salt marsh near the river *Ohio*, were dug up several skeletons of animals of enormous size. One tooth, belonging to a large row, weighed upwards of eleven pounds. A thigh bone of a quadruped was found in the same place, which was more than four feet in length. *Buffon*, Nat. Hist. Tom. IX. These, corresponding to the preceding account, seemed to have belonged to the *mammouth*, of which the species probably was extinct after the deluge.

13. In the year 1783, a huge skeleton, probably of this kind, was discovered in a marl-pit, under a peat moss, surrounded by a stratum of sea-shells, and other marine productions, on the lands of Doctor *Percy*, Bishop of *Dromore*, in *Ireland*. The horns were seven feet and one inch long; the length of the skull one foot eleven inches; the breadth of the forehead above the eyes, eleven inches. All the bones were of a gigantic size, not in the least petrified, but as fresh as if the animal had only died a week before. *Miln's Physico-Theological Lectures*, p. 299.

These instances seem fully sufficient to establish the universality of the deluge, and its general progress northwards from the southern polar regions.

At what season of the year the deluge began, has been much disputed, whether in Spring, or in Autumn. The same arguments adduced in the *Chronological Apparatus*, to prove that the world was created in Spring, concur to intimate, that the "*second month*," when the deluge began, was reckoned by the sacred year, which began about the vernal equinox. And in addition to them, the history of the deluge itself seems to furnish internal evidence in favour of this opinion: for near the end of his confinement, the dove, sent forth by *Noah* out of the ark, brought him back, in her mouth, "an *olive-leaf* plucked off," (we may presume, with the ancient versions) from a *green* branch, which could only correspond to the season of *Spring*. And a great naturalist, *Woodward*, declares: "Among all the remains of the antediluvian world, I have found such a uniformity, and general consent, that I was able to discover what time of the year it was that the deluge began. The whole tenor of these bodies, thus preserved, clearly pointing forth the month of *May*. Nor have I ever met with so much as one single *plant*, or *body*, among all those vast multitudes which I have carefully viewed, that is peculiar to any other season of the year, or any

thing that falls out earlier or later; or any of them short, or further advanced in growth, seed, or the like, than they now usually are in that month." *Miln.* p. 321. These arguments seem to be decisive.

By a special providence, the ark, upborne by the flood, which continued to encrease for 150 days, then rested upon the neighbouring "mountains of *Ararat*." And immediately the waters began to abate from thenceforward, till the surface of the earth was dry, and fit for the residence of *Noah's* family. The ark probably was flat-bottomed, that it might the more easily take the ground; and if, when loaded with all its freight, it sunk to half its depth, 15 cubits, it would just touch the summit of *Ararat*, at the same elevation of water above it, which is remarkably recorded in Scripture to be the height to which it rose above the highest hills, "fifteen cubits" for the highest, "and upwards" for the lower.

Thus, under the guidance and protection of the Almighty, the ark was no longer tost to and fro by every wind, and buffeted by the most tremendous and frightful billows that ever raged, but rested on the ground steady and immoveable for the remainder of the deluge, and for ever after.

The fall of the deluge was more gradual than its rise. Though the waters sunk below the level of the high table land of *Armenia*, in the course of seven months and ten days more that *Noah* remained in the ark, yet it was probably a length of time before the waters all retired again into "*the fountains of the great abyss*," their former reservoirs, so as to leave the continents dry, as at the creation, the weight of the incumbent waters lessening as they sunk.

Thus did God, who "*founded the world upon the seas*," at the creation, "*establish it upon the floods*," at the deluge.

ARARAT, IN ARMENIA.

The determination of the site of this famous mountain is of considerable importance in *Sacred Geography*. The prevailing tradition in the east is, that it lies in the *greater Armenia*, near the borders of the ancient *Media*, from which it is separated by the rapid river *Araxes*, winding round its base on the north and east, until it falls into the *Caspian* sea.

Mount *Ararat*, according to Major *Rennel's* excellent map of

the ancient Persian empire, *Geography of Herodotus*, p. 229, lies in 39° 30′ north lat. and 44° 30′ east long. nearly in the middle of the vast ridge of *Taurus*, that "*stony girdle* encompassing the earth," as aptly described by the *Arabian* geographers, which runs eastwards from *Cilicia* through the whole extent of *Asia*, for *Ararat* lies nearly midway between the southern extremities of the *Euxine* and *Caspian* seas.

This relative position is confirmed by SCRIPTURE. The prophet *Jeremiah* (li. 27.) represents as contiguous to each other, "the kingdoms of *Ararat*, *Minni*, and *Ashkenaz*." But *Ararat* is rendered *Armenia* by the Syriac and Vulgate versions of Gen. viii. 4. and by the Septuagint, Arabic versions, and Chaldee paraphrase of Isaiah xxxvii. 38. followed in the latter passage by our English Bible. *Minni* denotes the lesser *Armenia* westwards of the former; and *Ashkenaz*, the ancient *Phrygia*, thence called *Ascania*, bordering on the *Black* sea; which was afterwards metamorphosed by the Greeks into Αξενος, "*the inhospitable* sea," and by a more flattering appellation again into Ευξενος, "*hospitable*;" whence the present *Euxine*, according to *Bochart's* ingenious conjecture, Vol. I. p. 173, 174.

This great mountain, called by the *Armenians*, at present, *Macis*, or "the Mother of the World *," and by the *Turks*, *Agridah*, or "the Great Mountain," is counted the highest in all *Armenia*, and probably in the world, if we consider its central position nearly between the great oceans, the *Atlantic* and *Eastern*, in the midst of the united continents of *Europe* and *Asia*. *Herodotus* reckoned the northern branch of "*Caucasus*," running between the *Euxine* and *Caspian* seas, "the greatest and highest of all mountains." B. i. § 203. But *Ararat* probably is higher; for whereas the snow remains on the other mountains of *Armenia*, which furnish the springs of the *Euphrates*, *Araxes*, and *Tigris*, but ten months of the year; on this, or rather the highest of its two tops, the western, the snow is permanent, and the summit covered with eternal snows, continually increasing from the time of the deluge; as we learn from *Tournefort's* entertaining and instructive *Voyage to the Levant*, Vol. III. p. 104, 195.

And, indeed, its greater elevation is confirmed by Scripture: for from the day when the waters began to decrease, as soon as

* *William de Rubruquois*, who travelled in 1253, mentions a town called *Cemainim*, or "the Eight," and they called the mountain near it, *Masis*, or "the Mother of the World." *Howard*, p. 121.

the ark grounded on the summit, "on the seventeenth day of the seventh month," until "the tops of the neighbouring mountains were seen on the first day of the tenth month," was an interval of 73 days, or ten weeks and three days; consequently, its superiority of elevation must have been considerable, to require so long a time for the sinking of the waters to their level. This superiority may justly be estimated by the distance from the top of the mountain to the limit of permanent snow, which, according to *Tournefort*, reaches half way down. The snowy region, according to his account, is absolutely inaccessible, by reason of its steepness. Few travellers, whose curiosity may lead them to explore it, can reach even to the limit of the permanent snow, on account of the great labour and difficulty of the ascent through sliding sands, which are daily increasing, and furnish the most barren and frightful desert imaginable, and from the danger of being devoured by tygers, which infest its lower region.

So great is the veneration of the *Armenians* for this mountain, that as soon as they can see it, (and it is so lofty that it can be seen at the distance of ten days journey) they kiss the earth, and repeat certain prayers, making the sign of the cross. They verily believe that the ark rested on its summit. The old patriarch of *Armenia*, who resided at *Erivan*, about two days' journey from the mountain, northward, when applied to for guides thither by *Tournefort* and his company, told them, that "God had never yet favoured any one with a sight of the ark, except only one saint of their order, who, after fifty years spent in fasting and prayer, was miraculously carried thither, but was so seized by the excessive cold that he died at his return." Vol. III. p. 183. Thus was it wisely ordained by Providence, that the ark should at length become inaccessible, and buried under perpetual snows, that it might not become an object of idolatrous veneration!

This mountain stands by itself, in the form of a sugar-loaf, in the midst of one of the greatest plains to be seen, stretching northward and westward, principally, as far as *Erzerum*, which is nine days' journey from thence, and is seated between two beautiful streams that form the heads of the *Euphrates*, and which spring from mountains to the north and east, little inferior in height to the *Alps*. P. 94, 101.

The great elevation of the level of *Armenia* is proved from

its extraordinary coldness. "At *Erzerum*," says *Tournefort*, "on the 14th of June, we were much surprised to find our hands so numbed at day-break that we could not write. This continued till after sun-rise, though the nights were pretty gentle, and the heats even troublesome, from ten in the morning unto four in the afternoon." P. 94. "There fell some snow about *Erzerum* in the night between the 2d and 3d of July." P. 120. And on the 14th of August, the third day after their visit to the mountain, during their stay at the *Three Churches*, there fell so much snow upon *Ararat*, that its smaller top, which before was clear, was all white with it. "We gave God thanks," said these pious travellers, "that we were safe returned, for we might have been lost there, or died with hunger upon the mountain." P. 208.

From the circumstance of the *olive-leaf*, brought back by the dove, on "the *evening*" of the same day that she had been let out the second time, *Tournefort* has raised a difficulty: "I do not see," says he, "*where* the dove, which went out of the ark, could find an olive-branch, if the ark be supposed to have rested upon Mount *Ararat*, or any of the mountains of *Armenia;* for this sort of tree is not found hereabouts, where the species must be lost, and yet olives are known to be a sort of tree that never die." P. 173. But whatever modern travellers may find, *Assyria*, which bounded *Armenia* on the south, was anciently famous for *olives*. 2 Kings xviii. 32. And *Strabo* says expressly, that olives grew in *Gogarene*, a province of *Armenia*. Lib. II. p. 800. And from either of those places, the dove, which is a bird of strong wing and rapid flight, might have returned in the evening of the same day. This objection, therefore, only tends to confirm the *Mosaical* account.

An additional argument for the descent of *Noah's* family from the top of *Ararat*, in *Spring*, may be drawn from the clouds, with which it is constantly capped during the *winter* half of the year; and from the greater facility of procuring provisions for all the tenants of the Ark, on their descent into the plain, during the *summer* half-year.

RESIDENCE OF NOAH'S FAMILY.

When *Noah* and his family quitted the Ark, they descended, as it were, from the clouds, to inhabit the rich and fertile plains that lay at the foot of the mountain; which are thus described by *Tournefort*.

"The country is admirably fine, and I do not know of any that can give us a better idea of *Paradise*. It is full of rivulets, which render it extremely fruitful: and I question whether there be any other country in the world, where one may gather so many commodities all at one time. Besides great quantities of all sorts of *grain*, there are fields of prodigious extent covered with *tobacco*. The rest of the country abounds with *rice*, *cotton*, *flax*, *melons*, *pastiches*, *orchards*, and fine *vineyards*. The people at *Erivan* are simple enough to believe that the vines are of the same sort which *Noah* planted. Gen. ix. 20. Be that as it may, they yield a very good wine.—The wine there is admirable; but the culture of vines is very difficult, by reason of the cold and frosts: which oblige the dressers, not only to cover, but to bury them under ground, at the beginning of winter, where they are kept till the spring." P. 172.

But in *Noah's* time, and for several centuries afterwards, *Armenia* was probably warmer than at present. For though the waters had sunk below the level of this high table land, in the course of seven months from their decrease, yet it was probably a considerable length of time, several centuries perhaps, before they were reduced to their proper level. And, therefore, if we consider the larger surface of the seas, and smaller elevation of the land above the level of the seas at that time, on both accounts, the temperature should then be milder.

PARTIAL DELUGES.

That such happened in different places after the general deluge, at intervals, may be collected, both from local evidences, and from ancient records.

1. From the present aspect of the country itself, there is the greatest reason to think, that the *Euxine*, or *Black Sea*, the *Caspian*, and the lake of *Aral*, stretching along the northern skirts of *Taurus*, formerly covered a much greater extent of ground than at present, and were even united in one great inland sea: and that, in process of time, the mounds, which confined it on the south, being either gradually sapped and undermined by the pressure of the accumulated waters, or suddenly rent asunder by earthquakes or volcanos, or by the combination of both, gave way, or were broken down, whereby vast bodies of water were suddenly discharged into the *Mediterranean* Sea, inundating its

borders, till then separated from the *Atlantic* Ocean; and deserting great tracts of land behind it; and so forming three separate lakes, of their present dimensions. In confirmation of this, not only on their immediate borders, but to very great distances northwards, up the courses of the *Don*, the *Wolga*, and the *Jaick*, these three seas are surrounded by flat, sandy deserts, destitute of fresh water, but interspersed with innumerable small lakes, whose waters are salt or bitter. The plains of *Cuban* stretching between the Black and Caspian Seas, and those that lie between the latter and the lake of *Aral*, and far eastward of this last, bear still more evident marks of having been once covered by waters. All these deserts are strewed with *shells* belonging to fish, of similar kinds with those yet found in the Caspian. And it is said, that the ancient extent of this former interior sea may be traced over the whole desert of *Astracan*, and beyond the *Jaick*, by the symptoms of coast, with which the elevated plains of *Russia* border this desert, and by the fossil productions covering its whole surface. The same appearances have been found on the plains of the *Borysthenes*. Other travellers have remarked the traces of sea in the plains of *Asia Minor*, and of *Persia*, and above the *Danube*, very far above the actual limits of the Caspian and the Black Sea. But the whole range of its southern great mountainous barrier is so strong by nature, that it could not be broken through any where, except where the present streights of the *Bosphorus* are situated.

By the irruption of such a vast body of waters from the Northern Seas, the countries contiguous to the *Mediterranean*, must have been deluged, and many islands formed, which before were connected lands; and numbers of the inhabitants have been drowned on the maritime coasts of *Europe*, *Asia*, and *Africa*, surrounding this sea. And from this circumstance, probably, the southern parts of Europe received in Scripture the denomination of "*the isles of the nations*," in the earliest times. Gen. x. 5.

That the level of the Mediterranean Sea indeed in ancient times was considerably higher than at present, has been confirmed of late years by means of the works carried on for the improvement of the fortifications of *Gibraltar*. In excavating, or boring the ground, petrified human bones have been found in very great numbers, either incased in the rocks, or heaped together in subterraneous caverns. Their petrifaction proves them

to be of very ancient date, before they and the surrounding stone became so hardened by the joint operation of salt water and air. They are probably the remains of the islands and submerged lands of the Archipelago, and of the various coasts of the Mediterranean, swept away by the sudden irruption of the Black Sea, and conveyed thither by a strong current driving impetuously against the barrier which separated the Mediterranean from the Atlantic Ocean: until this mound, at length, undermined, or perforated, by the accumulated weight of this new torrent, still depositing these floating bodies in its recesses, was burst open, and gave a vent for the redundant waters into the Atlantic Ocean through the Straits, into the Ocean; until the interior waters sunk to the same level as the exterior.

2. And this perfectly corresponds with ancient and general tradition. *Diodorus Siculus* asserts, that the *Euxine* Sea was formerly a great lake, whose waters, increasing by length of time, at last broke down the mounds which restrained them, and forced themselves a passage in the first instance near the *Cyanean* islands; and, finally, through the *Hellespont*. *Strabo* also cites the authority of *Strato*, who maintained that the Euxine had formerly no opening near *Byzantium;* but that the great rivers which run into it, at last forced an opening, and flowed from thence into the *Propontis*, and next opened themselves a passage through the *Hellespont*. He further states, that the same event took place in the *Mediterranean*, which opened itself a passage, near the columns of Hercules, into the Atlantic; and that, in consequence of this discharge, great tracts of land, which had before been covered with water, now first emerged. And according to *Plato*, the island *Atalantis* was overwhelmed by an inundation; but it lay beyond the streights of Gibraltar, in the ocean.

The rupture of the streights of the *Baltic* was probably effected by a similar cause. The bason of that sea might have retained some of the redundant waters of the deluge, after the rest were withdrawn into the subterraneous caverns; or it might have been filled by the waters of all the surrounding rivers of the higher lands of *Germany*, *Poland*, *Russia*, *Sweden*, and *Denmark*, which are as numerous and copious as those that flow into the *Black* Sea; and these accumulated waters at length forced themselves a passage into the ocean. And to confirm this, the old *Swedish* historians report, that formerly their whole

country, except the mountains, which then composed a group of islands, was covered with water. And *Linnæus* and *Celsius*, in the *Amœnitates et Acta Academiæ Sueciæ*, observe, that the sea-ports of East and West *Bothnia*, and of the Eastern side of *Gothland*, are every year decreasing in depth; and that the inhabitants of West *Bothnia* have observed, by marks upon rocks, that the sea decreases every ten years about five inches. This, no doubt, is effected by the gradual deepening of the Streights, which carry off the Baltic waters into the North Sea.

There is indeed reason to think, that this Sea, formerly, approached the Black Sea; for *Diodorus* relates, that the Argonauts sailed from the *Euxine*, up the *Tanais;* and that, *after a short passage by land*, they found rivers which carried them into the *North Sea*, and thence into the Ocean; from whence they returned through the straits of *Hercules* to *Telamon*. The story, no doubt, is improbable; but it shews that there existed a tradition, that the Euxine Sea was once not very distant from the Baltic. And indeed the ancient name of *Pontus*, or "the Great Sea," given to the *Euxine*, in times preceding the Argonautic expedition, denotes that it was then of much greater extent than at present.

To successive disruptions of the barriers of the Euxine Sea, at the *Bosphorus*, may naturally be ascribed the early deluges of *Ogyges* and *Deucalion*, so celebrated in Grecian History; the latter of which is confounded by *Ovid* with the general deluge.

His description of *Deucalion*, Mount *Parnassus*, and the renewal of the human race, by casting stones over the shoulders of *Deucalion* and *Pyrrha*, which became men and women, is evidently taken and caricatured from the *Mosaical* account.

The flood of *Ogyges*, which inundated *Bœotia* and *Attica*, the ravages of which those countries did not recover for 200 years, happened, according to the ancient Greek historians, *Hellanicus*, *Castor*, &c. 1020 years before the first Olympiad, B.C. 776, or B.C. 1796. It preceded *Deucalion's* deluge 248 years, according to *Cedrenus*, from an ancient computation, which therefore happened B.C. 1518, or in the second year of *Deucalion's* reign, according to the preceding rectification of the *Parian Chronicle;* and is reckoned the most important and destructive that ever happened, by the Grecian writers. It is possible that the first rupture of the *Bosphorus*, might have preceded the flood of *Ogyges;* but it is highly probable, that it was finally

completed by the flood of *Deucalion* * ; and that not long after the latter, the straits of *Gibraltar* were burst open, to give an outlet to the surcharged waters of the *Mediterranean:* and to the gradual deepening of the Straits, we may attribute the recess of the waters from the Eastern shores of the *Mediterranean;* which were formerly covered to a greater extent.

It has been supposed by *Buffon* and others, that the disruptions of the barriers of the *Mediterranean* and *Baltic*, proceeded from without, from the fury of the ocean bursting in. This certainly might have contributed to weaken them on the outside; but the effect seems most naturally to have been produced from the inside. To invalidate the argument, in the case of the Mediterranean, and to set aside the accumulation of its waters from the interior seas and rivers, it has been contended, 1. That evaporation on the surface of the Mediterranean Sea, by the heat of the sun, draws off the surplus waters; and that this is proved, 2. By the constant in-draught of the waters of the ocean setting into the mouth of the Streights.

But to this it is answered by *Howard*, 1. That the rains which fall in great torrents, restore much of the waters evaporated by heat; and that no evaporation takes place in the Baltic, on account of the coldness of the climate: and 2. That there is an under current, in the gut of *Gibraltar*, constantly setting outwards from the Mediterranean, which may discharge a greater body of water than is admitted by the upper: and 3. That from a Chart published in *Germany* during the last siege of *Gibraltar*, of the tides and currents in the Streights, it appears, that whilst a strong upper current drives from the ocean into the Mediterranean, along the coasts of *Africa;* a contrary upper current sets into the ocean from that sea, turning round *Europa* point

* The flood of *Deucalion* may rather perhaps have originated from a disruption and discharge of waters in *Thessaly* itself, described by *Herodotus*, B. 7, 129.

"*Thessaly* is said to have been anciently a *lake*, surrounded on all sides by lofty mountains; to the East, by *Pelion* and *Ossa*, whose bases meet each other; to the North, by *Olympus;* to the West, by *Pindus;* and to the South, by *Othrys*. The intermediate space is *Thessaly*, a hollow country, watered by a great many rivers, the principal of which are *Peneus*, *Apidanus*, *Orochonus*, *Enipeus*, and *Pamisus*. These rivers, collected in the plain, cross a very narrow valley [*Tempe*] at the outlets of the mountains, and discharge themselves into the sea by one common channel, which assumes the name of *Peneus*, absorbing the rest. It is said that formerly, *before this aperture to the sea existed*, these five rivers, and the lake *Bœbeis* also, had not distinct names as at present; but that their body of water being as great, and flowing incessantly, made *the whole of Thessaly a sea*."

into the bay of *Gibraltar*, and sweeping round that bay, takes its course along the coasts of *Andalusia* *. According to that Chart, the whole Streights may be divided into five bands, in all which the tides are different: in the mid-channel, the tide coincides with the ocean; in the two bands on each side, the hours of flow and ebb are different from that of the ocean, and different from each other; in the two bands following the two coasts, the hours of tide are the same, though different from all the others. 4. The same counter-currents prevail also in the Streights of *Constantinople*: over against that city, the most rapid of its superior currents drives into the *Black* Sea along the *Asiatic* Coast, yet no one doubts that the *Black* Sea pours a considerable surplus of water into the *Mediterranean*; and that the general current of the latter sets from East to West, is ascertained beyond a doubt, by the usually longer navigation *up* than *down* the Mediterranean, according to the nautical phrase, founded on experience. See *Howard's* fourth letter, with its notes and illustrations; from which this article is principally extracted.

THE TERRAQUEOUS GLOBE.

The last century has been more productive of Geographical discoveries than any, or almost all that preceded it. The fictions of speculative Geographers for ages past, have been imaginary *Continents* in the Southern hemisphere, and imaginary *seas* in the Northern. The true proportion of land to water on the earth's surface, was never ascertained till the voyages of discovery made by that celebrated British Navigator, Captain *Cook*, under the auspices of his present Majesty, *George* III. in three successive voyages round the world. The result of which, as being of considerable importance in itself, and throwing great light on the process of the original colonization of the earth by the families of *Noah's* sons, is thus expressed by himself:

"I have now made the circuit of the *Southern* Ocean in a high latitude; and traversed it in such a manner, as to leave not the least room for there being a *Continent*, unless near the *South Pole*, and out of the reach of navigation. By twice visiting the Tropical Sea, I had not only settled the situation of some old

* This outer current flows with such impetuosity, that ships to enter the Streights are forced first to gain Cape *Spartel* on the African side, to effect their purpose; especially if they aim to enter the bay of *Gibraltar*.

discoveries, but made there many new ones, and left, I conceive, very little to be done, even in that part. Thus I flatter myself, that the intention of the voyage has in every respect been fully answered. The Southern Hemisphere has been fully explored, and a final end put to the searching after a Southern Continent, which has at times engrossed the attention of the maritime powers for near two centuries past, and been a favourite theory amongst the Geographers of all ages." *Cook's* Second Voyage, Vol. II. p. 239.

If in his two first Voyages Captain *Cook* annihilated imaginary southern lands, he has made amends for the havoc in his third and last voyage, by annihilating imaginary northern seas, and filling up the vast space which had been allotted to them, with the solid contents of his new discoveries of *American* land, farther West and North than had been hitherto traced.

The two continents of *Asia* and *America*, so widely separated from each other by the vast Pacific or Eastern ocean, at their Southern extremities, are now found to approach each other towards the Northern, within *thirteen* leagues, instead of *eight hundred*, as supposed by the author of *Recherches Philosophiques sur les Americains.* And in this narrow streight there are several intervening islands, as *Behring's*, &c.

Among other good purposes, therefore, these voyages have rendered essential services to Religion, by robbing *Infidelity* of a favourite objection to the *Mosaical* account of the peopling of the earth. *North America* might have been easily furnished with inhabitants from the opposite coasts of *Asia;* and *South America*, by means of the great chain of newly discovered tropical isles, scattered between the two great Continents, and successively colonized from *Asia;* and also, on its Eastern side, by vessels driven by storms, or trade winds and currents, from the shores of *Europe* and *Africa;* and indeed the similarity of languages, religion, manners, and customs, in several leading points, furnishes decisive evidence of the descent of all mankind from the same parent stock.

The seas, both of the North and South, grow shallower, the nearer they approach to the Pole. Captain *Cook*, in his repeated voyages round the *Antarctic circle*, constantly found innumerable isles and fields of ice obstructing his course in lat. 61 and 62, South. Having, however, penetrated as far, in some parts, as lat. 72, he there found a firm and fixed continent of ice, on

which he descried vast accumulated mountains. From repeated and judicious observations, he pronounces this to be owing, not to the proximity of lands; the islands which he called *Sandwich*, in lat. 59, being the last which he descried towards that Pole; but to the shallowness of that sea: the accumulating snows and ice sinking there to the very bottom, become immoveably fixed thereto. In the *Northern hemisphere*, it was not the proximity of land which stopped his progress, for he passed *Behring's* Straits: but though the lands diverging from thence open a more extensive widening sea, he was again stopped by an icy continent, in lat. 70, North, because he perceived the sea was there so shallow, as to suffer the ice to be rooted to its bottom. On the opposite western side of the hemisphere, it is well known, that the sea, though sometimes covered with floating ice, is passable, in the proper season, and even becomes less obstructed, as far as lat. 88, to which, by various accounts, it appears that some ships have penetrated. This probably is owing to the greater depth of the ocean about *Spitzbergen*, and northwards, for a considerable extent.

This curious discovery puts an end likewise to the doubts that have been raised about the difficulty of maintaining the equilibrium of the earth, from the greater redundance of land in the Northern, than in the Southern hemisphere. We know the fact, that the equilibrium is maintained; whence we may safely conclude, either that the shallowness of the Polar seas leaves the earth of the same density at each pole, or rather, perhaps, that all these inequalities on the surface of the land and water, are light and insignificant, compared with the great solid mass of the earth itself, nearly 8000 miles in diameter.

Opinionum commenta delet dies,
Naturæ judicia confirmat.

"The fictions of *hypothesis*, lapse of time effaces,
But confirms the decisions of *Nature!*"
—And the dictates of *Revelation*.

NOAH AND HIS SONS.

Noah survived the deluge 350 years, and *Shem* 500 years. This is decisive evidence against the hypothesis, that the diminution in the standard of human life after the deluge, was owing to the unwholesomeness of the atmosphere, occasioned by the

stagnant waters after the deluge; for the longevity of Noah exceeded that of any of his ancestors, except *Methuselah;* of whose age of 965 years, *Noah's* wanted only 15 years; and *Shem* survived his father 150 years, and probably his brothers lived as long. The regular reduction of nearly 200 years each, for three sets of generations, from *Shem*, 600 years, to *Terah*, 205, marks design; and the successive reductions, down to *David*, when the standard was lowered to 70 years, at a time when, according to the hypothesis, the stagnant waters of the deluge must have long since been dried up every where, and, of course, the earth rendered more wholesome, shows, that the diminution must be resolved into the sole will and pleasure of our Creator.

During the lives of *Noah* and his sons, their families occupied *Armenia*, and probably extended themselves into the adjacent pleasant and fertile regions of *Georgia*, *Assyria*, and *Media*.

It was probably near the close of his life, that *Noah* delivered that famous prophecy respecting the fortunes of the three great families that peopled the whole earth, so wonderfully descriptive of their distinctive characters at the present day, and so minutely fulfilled in their respective settlements. As a *Geographical* prophecy, therefore, it requires to be noticed in this place.

NOAH'S PROPHECY.

The immediate occasion of this prophecy is stated to be the intoxication of *Noah;* in consequence of which he lay exposed in his tent. And *Ham*, the father of *Canaan*, saw the nakedness of his father, and told his two brethren without. And *Shem* and *Japheth* dutifully covered him with a garment, going backwards that they might not see his nakedness. And when *Noah* awoke from his wine, and knew what his *youngest son* had done unto him, he said,

I. "Cursed be *Canaan*:
A servant of servants shall he be to his brethren.
II. Blessed be THE LORD, THE GOD of *Shem*,
And *Canaan* shall be his servant.
III. GOD shall enlarge *Japheth*,
He shall even dwell in the tents of *Shem;*
And *Canaan* shall be his servant."—Gen. ix. 20—27.

It has been generally supposed that the *youngest son*, here meant, is *Ham;* the same who saw and told his father's un-

seemly situation to his brothers. And hence the reading of the Arabic version, "*Ham, the father of Canaan,*" in the three branches of the prophecy, instead of "*Canaan*" singly, as the subject of the curse throughout, upon him and upon his posterity in general, extending even to the youngest, *Canaan;* has, either virtually or expressly, been adopted by the current of Commentators, ancient and modern; and was thence inadvertently introduced into the text itself, in the first edition of this work.

Josephus thus explains the transaction: While *Noah* lay in an unseemly posture, *the youngest of his sons*, seeing it, shewed it to his brothers, mocking: but they covered their father. And when *Noah* knew, he blessed his other sons; he did not curse *Ham* himself, *on account of his kindred to him;* but he cursed his descendants: and the *rest escaping the curse*, God inflicted it on the children of *Canaan*." Antiq. I. 6, 3.

Abulfaragi, also: "*Noah* cursed *Canaan* the son of *Ham*, *although the offence was his father's, not his own*, because he knew by revelation, what he would afterwards perpetrate, in making musical instruments, in fornication and other base practices, which the sons of *Cain* applied themselves to teach." Dynast. p. 11.

And even the most learned expositors have implicitly adopted the appropriation of the Curse of servitude to *Ham* and his posterity. *Bochart* styles *Ham accursed;* and represents *Noah* as foretelling that *his children should be slaves;* while *Mede*, not content with calling upon us *to tremble at the horrible curse of impious Ham;* and with intimating that he was destined to be *a servant of servants to all his brethren*, roundly asserts, that *there hath never yet been a son of Ham that hath shaken a sceptre over the head of Japheth; that Shem hath subdued Japheth, and Japheth hath subdued Shem, but Ham never subdued either*." Mede's Works, Disc. 49 and 50, pp. 271, 283.

The integrity, however, of the received text of the prophecy, limiting the curse to "*Canaan*" singly, is fully supported by the concurrence of the *Masorete* and *Samaritan* Hebrew texts, with all the other ancient versions, except the *Arabic;* and is acknowledged, we see, by *Josephus* and *Abulfaragi*, who evidently confine the curse to *Canaan;* though they inconsistently consider *Ham* as the offender, and are not a little embarrassed, to exempt him, and the rest of his children, from the operation

of the curse; an exemption, indeed, attested by sacred and profane History: for *Ham* himself had his full share of earthly blessings, his son *Misr* colonized *Egypt*, thence styled "the land of *Ham*," Ps. cv. 23, which soon became one of the earliest, most civilised and flourishing kingdoms of Antiquity, and was established before *Abraham's* days, Gen. xii. 14—20; and in the glorious reign of *Sesostris*, extended its conquests both in Asia and Europe into the territories of *Shem* and *Japheth*; while *Ham's* posterity in the line of *Cush*, not only founded the first *Assyrian* Empire under *Nimrod*, but also the *Persian*, the *Grecian*, and the *Roman* Empires; in direct contradiction to the unguarded assertion of *Mede*.

How then is the propriety of the curse, exclusively to *Canaan*, to be vindicated? evidently by considering him as the only guilty person. And this may be done by adopting the very ingenious conjecture of *Faber*, that the "*youngest son*," who offended, was not *Ham*, but *Canaan*; not the son, but the grandson of *Noah*. For the original, "his *little son*," according to the latitude of the Hebrew idiom, may denote a *grandson*; by the same analogy, that *Nimrod*, usually considered the youngest son of *Cush*, Gen. x. 8, was, most probably, his great grandson; as being the contemporary of *Peleg*, the great grandson of *Shem*, "in whose days the earth was *divided*," Gen. x. 25; compare Gen. x. 10, and xi. 9.

And this interpretation is supported by ancient Jewish tradition, *Beresith Rabba*, § 37, recorded also by *Theodoret*, in Gen. quest. 57, that "*Canaan* first saw his grandsire's nakedness, and shewed it to his father, in mockery of the old man." The tradition indeed, adds, that *Ham* joined in the mockery; but for this addition there seems to be no sufficient ground: *Canaan* might have invited his father to come and see a ludicrous spectacle, without precisely communicating what it was; and *Ham* might have been thus *led*, innocently and inadvertently, to *see* * his father's exposure; not joining, however, in *Canaan's* mockery, he might have withdrawn in disgust, from the degrading spectacle, and with concern communicated it to *Shem* and *Japheth*

* The original verp, ירא, rendered "*he saw*," in the active conjugation Kal, occurs in the same defective form in Hiphil, "*he made to see*," or "*shewed*," 2 Kings xi. 4, and is in the same form in the passive Hophal, "*was made to see*," or "*was shewn*," as acutely remarked by *Faber*.

without; and they, being thus made acquainted with their father's exposure, piously contrived to cover, without beholding it themselves. In this transaction *Ham* took no active part; *Noah*, therefore, passed him over in silence, without either a blessing or a curse; as he had done nothing to incur a curse, nor any thing to merit a special blessing; he only pronounced a curse upon the guilty and depraved *Canaan*, that he should be a "*servant of servants* to his *brethren*" in general, to the other descendants of *Ham*, as well as to the descendants of *Shem* and *Japheth*; while he predicted appropriate blessings to their descendants, spiritual and temporal.

Hence we may see a reason, why *Ham*, at the beginning of the narrative, is described as *the father of Canaan*, rather than as the father of *Cush*, *Misr*, or *Phut*. It was evidently designed to draw attention to *Canaan*, though the youngest of his sons, on account of the curse of servitude denounced against him at the end; and, therefore, as pre-eminent in disgrace, on account of the enormity of his guilt.

Let us now proceed to the completion of the prophecy in its several parts.

I. The curse denounced against *Canaan's* posterity, to be "*servant of servants*," the lowest of servants, even slaves, to their brethren in general, did not affect *individuals*, nor even *nations*, so long as they continued righteous. In *Abraham's* days, *Melchisedek*, whose name was expressive of his character, signifying "king of righteousness," was a worthy and revered "*Priest* of THE MOST HIGH GOD." And *Abimelech*, whose name denotes "parental king," pleaded the "integrity of his heart," and "the righteousness of his nation," before God: and his plea was accepted. Yet they both appear to have been *Canaanites*. See Gen. xiv. 18—20; xv. 16; xx. 4—9. At the same time, the impieties and abominations of their neighbours, in the cities of *Sodom* and *Gomorrah*, &c. drew down the signal vengeance of heaven in their overthrow.

In the fourth generation afterwards, when the "iniquity of the *Canaanites* was come to the full," or a general corruption had taken place; when in the energetic imagery of Scripture, "the land itself *vomited* forth its inhabitants," on account of their frightful impieties and abominations, as detailed, Levit. xviii. 25—28, containing the fullest justification of the infliction

of the *national* curse; *Canaan* was in part exterminated, and in part reduced to servitude, by the *Israelites* of the House of *Shem*, under the conduct of *Moses*, *Joshua*, and *David*. Afterwards he fell under the yoke of *Ham* and *Shem*, when he bowed the neck beneath the *Medo-Persian* Sceptre; he fell under the yoke of *Ham* and *Japheth* together, when his land became a province of the *Macedo-Grecian* and *Roman* Empires; and he was subjected to *Japheth*, *Ham*, and *Shem*, conjointly, when he finally yielded to the *Tartaric* Ottomans; under whose iron sceptre, he still languishes, enslaved.

II. *Shem*, signifying "name," or "renown," though he attained not to great temporal power, being usually under the influence of *Japheth*, received the promise of a spiritual blessing, which raised him high in dignity above either of his brothers. He was chosen to be the ancestor of the blessed "seed of the woman," "the Man CHRIST JESUS," in preference to his elder brother *Japheth*. To this glorious privilege, *Noah*, to whom it was probably revealed, might have alluded, in that devout ejaculation;—"Blessed be THE LORD, THE GOD of *Shem*;"—who was destined to be "the glory of his people *Israel*;" in after ages, while the rest of the *Pagan* world "lay in darkness and in the shadow of death."

III. *Japheth* signifies "enlargement." And how wonderfully did Providence *enlarge* the boundaries of *Japheth!* His posterity diverged eastwards and westwards; from the original settlement in *Armenia*, through the whole extent of *Asia*, north of the great range of *Taurus*, distinguished by the general names of *Tartary* and *Siberia*, as far as the Eastern Ocean; and in process of time, by an easy passage across *Behring's* streights, the entire continent of *America;* and they spread in the opposite direction, throughout the whole of *Europe*, to the *Atlantic* Ocean: thus literally encompassing the earth, within the precincts of the northern temperate zone. While the enterprising and warlike genius of this hardy *hunter*-race, frequently led them to encroach on the settlements, and to dwell in "the tents of *Shem*," whose *pastoral* occupations rendered them more inactive, peaceable, and unwarlike: as when the *Scythians* invaded *Media*, and overran western Asia southwards, as far as *Egypt*, in the days of *Cyaxares;* and when the *Greeks*, and afterwards the *Romans*, subdued the *Assyrians*, *Medes*, and

Persians in the East, and the *Syrians* and *Jews* in the South; as foretold by the *Assyrian* prophet, *Balaam*:

> "And *ships* shall come from the coast of *Chittim*,
> And shall afflict the *Assyrians*, and afflict the *Hebrews*,
> But he [the invader] shall perish himself at last."—Numb. xxiv. 24.

And by *Moses*:

> "And the Lord shall bring thee [the *Jews*] into *Egypt* [or bondage] again with *ships*," &c.—Deut. xxviii. 68.

And by *Daniel*:

> "For the ships of *Chittim* shall come against him" [*Antiochus*, king of *Syria*.]—Dan. xi. 30.

In these passages *Chittim* denotes the southern coasts of *Europe*, bordering on the *Mediterranean* Sea, called the "*Isles* of the Gentiles." Gen. x. 5. And in later times, the *Tartars* in the East have repeatedly invaded and subdued the *Hindus* and *Chinese*; while the warlike and enterprising genius of the *British* isles have spread their colonies, their arms, their arts, and their language, and in some measure, their religion, from the rising to the setting sun. And now, "Blessed be THE LORD!" He who was "the GOD of *Shem*," in former times, is now become more especially the GOD of *Japheth*!—Now *Europe*, that most highly and gratuitously favoured quarter of the Globe, though the smallest, is blessed with the marvellous light of the Gospel; while *Asia* has sunk, in turn, into the darkness of Idolatry and superstition: the lamps of the *Asiatic* Churches which formerly shone so brightly, are now well nigh extinguished! How long this inestimable blessing may be preserved to *Europe* is matter of awful and anxious concern: the apostacy of too many of the *European* Churches from the genuine faith of Christ, and the lukewarmness of the rest, threaten the extinction of their lamps also, and that ominous retaliation denounced against the invader, that "He shall perish at last!"

The mention of *Canaan*, the youngest son of *Ham*, proves that this signal prophecy was uttered long after the deluge, and probably near the end of *Noah's* days. It evidently alludes to the divine Decree for the orderly division of the Earth among the three primitive families of his sons; where it notices the "tents of *Shem*," and the "enlargement of *Japheth*." This de-

cree was probably promulgated by the venerable Patriarch, about the same time. *Eusebius*, and others of the fathers, on the authority of ancient tradition, assign it to the nine hundred and thirtieth year of *Noah's* life, or about twenty years before his death; that is, in the three hundred and thirtieth year after the deluge, or B.C. 2825. Euseb. Chron. p. 10. Syncell. Chronog. p. 89. Epiphan. Oper. I. p. 703.

DIVISION OF THE EARTH.

The prevailing tradition of such a Decree for this three-fold division of the earth, is intimated both in the Old and New Testament. *Moses* refers to it, as handed down to the *Israelites*, "from the days of old, and the years of many generations; as they might learn from their *fathers* and their elders," and further, as conveying a special grant of the land of *Palestine*, to be the lot of the twelve tribes of *Israel*.

> "When THE MOST HIGH divided to the Nations their settlements,
> When He separated the Sons of *Adam*,
> He assigned the boundaries of the peoples [of *Israel*]
> According to the number of the sons of *Israel*:
> For the portion of the Lord is his people,
> *Jacob* the lot of his inheritance."—Deut. xxxii. 7—9.

And this furnishes an additional proof of the justice of the expulsion of the *Canaanites*, as usurpers, by the *Israelites*, the rightful possessors of the land of *Palestine*, under *Moses*, *Joshua*, and their successors, when the original grant was renewed to *Abraham*. Gen. xv. 13—21.

And the knowledge of this Divine decree will satisfactorily account for the panic terror, with which the devoted nations of *Canaan* were struck, at the miraculous passage of the Red Sea, by the *Israelites*, and approach to their confines; so finely described by *Moses*:

> "The nations shall hear [this] and tremble,
> Sorrow shall seize the inhabitants of *Palestine*.
> Then shall the Dukes of *Edom* be amazed,
> Dismay shall possess the princes of *Moab*,
> The inhabitants of *Canaan* shall melt away:
> Fear and terror shall fall upon them,
> By the greatness of thine arm they shall be petrified,
> Till thy people pass over [*Jordan*] O LORD,
> Till the people pass over, whom Thou hast redeemed!"—Exod. xv. 14—16.

St. *Paul* also addressing the *Athenians*, refers to the Divine decree, as a well known tradition in the heathen world.

"God made of *one blood* every nation of men to dwell upon the whole face of the earth; having appointed the predetermined *seasons* and *boundaries* of their dwellings. Acts xvii. 26.

Here he represents mankind as all of *one blood*, race, or stock, "the sons of *Adam*" and of *Noah* in succession; and the *seasons* and the *boundaries* of their respective settlements, as previously regulated by the divine decree. And this was conformable to their own Geographical Allegory: that *Chronus*, the god of time, or *Saturn*, divided the universe among his three sons; allotting the heaven to *Jupiter;* the sea to *Neptune*, and hell to *Pluto*. But *Chronus* represented *Noah*, who divided the world among his three sons, allotting the upper regions of the North to *Japheth*, the maritime or middle region to *Shem*, and the lower regions of the South to *Ham*.

According to the *Armenian* tradition recorded by *Abulfaragi*, *Noah* distributed the habitable earth from north to south between his sons, and gave to *Ham* the region of the blacks; to *Shem* the region of the *tawny* (fuscorum); and to *Japheth*, the region of the *ruddy* (rubrorum). P. 9. And he dates the actual division of the earth, in the 140th year of *Peleg*, B.C. 2614; or 541 years after the deluge, and 191 years after the death of *Noah*, in the following order:

"To the sons of *Shem* was allotted the middle of the Earth, namely, *Palestine*, *Syria*, *Assyria*, *Samaria*, (*Singar* or *Shinar*,) *Babel* (or *Babylonia*), *Persia*, and *Hegiaz* (*Arabia*.)

"To the sons of *Ham*, *Teiman* (or *Idumea*, Jer. xlix. 7.) *Africa*, *Nigritia*, *Egypt*, *Nubia*, *Ethiopia*, *Scindia*, and *India*, (or *India*, west and east of the river *Indus*.)

"To the sons of *Japheth* also, *Garbia* (the *north*), *Spain*, *France*, the countries of the *Greeks*, *Sclavonians*, *Bulgarians*, Turks, and *Armenians*." Annals. p. 11.

In this curious and valuable Geographical Chart, *Armenia*, the cradle of the human race, was allotted to *Japheth*, by right of primogeniture; and *Samaria* and *Babel* to the sons of *Shem;* the usurpation of these regions therefore by *Nimrod*, and of *Palestine* by *Canaan*, was in violation of the divine Decree.

Though the migration of the primitive families began at this time, B.C. 2614, or about 541 years after the deluge, it was a length of time before they all reached their respective destina-

tions. The "*seasons*" as well as the "*boundaries*" of their respective settlements were equally the appointment of GOD. The nearer countries to the original settlement being planted first, and the remoter in succession. These primitive settlements seem to have scattered and detached from each other, according to local convenience. Even so late as the tenth generation after the flood, in *Abraham's* days, there were considerable tracts of land in *Palestine* unappropriated, on which he and his nephew *Lot* freely pastured their cattle, without hindrance or molestation. That country was not fully peopled till the fourth generation after, at the exode of the Israelites from *Egypt*. And *Herodotus* represents *Scythia* as an uninhabited desert, until *Targitorus* planted the first colony there, about a thousand years, at most, before *Darius Hystaspes* invaded Scythia, or about B.C. 1508.

The orderly settlements of the three primitive families are recorded in that most venerable and valuable Geographical Chart,

THE TENTH CHAPTER OF GENESIS,

in which, it is curious to observe how long the names of the first settlers have been preserved among their descendants, even down to the present day.

I. *Japheth*, the eldest son of *Noah*, Gen. x. 21, and his family, are first noticed. Gen. x. 2—5.

The name of the patriarch himself, was preserved among his Grecian descendants, in the proverb *του Ιαπετου πρεσβυτερος*, "Older than *Japetus*," denoting the remotest antiquity. The radical part of the word Ιαπετ, evidently expressing *Japhet*.

1. *Gomer*, his eldest son, was the father of the *Gomerians*. These, spreading from the regions north of *Armenia* and *Bactriana*, Ezek. xxxviii. 6, extended themselves westward over nearly the whole continent of Europe; still retaining their paternal denomination, with some slight variation, as *Cimmerians*, in *Asia; Cimbri* and *Umbri*, in *Gaul* and *Italy;* and *Cymri*, *Cambri*, and *Cumbri*, in *Wales* and *Cumberland*, at the present day. They are also identified by ancient authors, with the *Galatæ* of *Asia Minor*, the *Gaels*, *Gauls*, and *Celtæ*, of *Europe*, who likewise spread from the *Euxine* Sea to the Western Ocean; and from the *Baltic* to *Italy* southwards, and first planted the *British* Isles. *Josephus* remarks, that the *Galatæ* were called

Γομαρεις, "*Gomariani*," from their ancestor *Gomar*. Ant. I. 6, 1. See the numerous authorities adduced in support of the identity of the *Gomerians* and *Celts*, by that learned and ingenious antiquary, *Faber*, in his Origin of Pagan Idolatry, Vol. III. B. 6. chap. 3. p. 447.

Of *Gomer's* sons, *Ashkenaz* appears to have settled on the coasts of the *Euxine* Sea, which from him seems to have received its primary denomination of Αξενος, *Axenus*, nearly resembling *Ashkenaz;* but forgetting its etymology in process of time, the Greeks considered it as a compound term in their own language, Α-ξενος, signifying "*inhospitable;*" and thence, metamorphosed it into Ευ-ξενος, *Eu-xenus*, "*very hospitable.*" His precise settlement is represented in Scripture as contiguous to *Armenia*, westward: for "the kingdoms of *Ararat*, *Minni*, and *Ashkenaz*," are noticed together. Jer. li. 27.

Riphat, the second son of *Gomer*, seems to have given name to the *Riphean* mountains of the north of *Asia*, and

Togarmah, the third son, may be traced in the *Trocmi*, of Strabo, the *Trogmi*, of Cicero, and *Trogmades*, of the Council of Chalcedon, inhabiting the confines of *Pontus* and *Cappadocia*.

2. *Magog*, *Tubal*, and *Mesech*, sons of *Japhet*, are noticed together by *Ezekiel*, as settled in the north, xxxviii. 2, 14, 15. And as the ancestors of the numerous *Sclavonic* and *Tartar* tribes; the first may be traced in the *Mongogians*, *Monguls*, and *Moguls;* the second in *Tobolski*, of Siberia; and the third, *Mesech* or *Mosoch*, in the *Moschici*, *Moscow*, and *Muscovites*.

3. *Madai* was the father of the *Medes*, who are repeatedly so denominated in Scripture. 2 Kings xvii. 6; Isa. xiii. 17; Jer. li. 11; Dan. v. 28, &c.

4. From *Javan* was descended the *Javanians*, or Ιαονες of the Greeks, and the *Yavanas* of the Hindus. *Greece* itself is called *Javan* by Daniel, xi. 2; and the people Ιαονες by Homer, Iliad. XIII. 685.

These aboriginal Ιαονες of Greece, are not to be confounded, as is usually the case, with the later Ιωνες, who invaded and subdued the *Javanian* territories, and were of a different stock. The accurate *Pausanias* states, that the name of Ιωνες, was comparatively modern, while that of Ιαονες is acknowledged to have been the primitive title of the barbarians who were subdued by the Ιωνες. Achaic. p. 396, 397. *Strabo* remarks, that *Attica* was formerly called both *Ionia* and *Ias*, or *Ian*. Geogr. Lib. IX.

p. 302. While *Herodotus* asserts, that "the *Athenians* were not willing to be called Ιωνες:" and he derives the name from Ιων, the son of *Xuth*, B. VIII. 44, descended from *Deucalion*, or *Noah*. And this *Ion*, is said by *Eusebius*, Chron. p. 13, 14, to have been the ringleader in the building of the tower of *Babel*, and the first introducer of Idol worship, and Sabianism, or adoration of the sun, moon, and stars. This would identify *Ion* with *Nimrod*. And the *Ionians* appear to have been composed of the later colonists, the *Palli*, *Pelasgi*, or roving tribes from Asia, Phenicia, and Egypt, who, according to *Herodotus*, first corrupted the simplicity of the primitive religion of Greece. B. II. §. 51, 52. and who, by the Hindus, were called *Yonigas*, or worshippers of the *Yoni*, or *dove*. This critical distinction between the *Iaones* and the *Iones*, the *Yavanas* and the *Yonigas*, we owe to the sagacity of *Faber*. Vol. III. p. 449.

Of *Javan's* sons, *Elishah* and *Dodon*, may be recognized in *Elis* and *Dodona*, the oldest settlements of Greece; *Kittim*, in the *Citium* of Macedonia, and *Chittim*, or maritime coasts of Greece and Italy, Numb. xxiv. 24; and *Tarshish*, in the *Tarsus* of Cilicia, and *Tartessus* of Spain.

II. *Ham* and his family are next noticed. Gen. x. 6—20.

The name of the patriarch is recorded in the title frequently given to *Egypt*, "the land of *Ham*." Ps. cv. 23, &c.

1. Of his sons, the first and most celebrated appears to have been *Cush*, who gave name to "the land of *Cush*," both in *Asia* and *Africa*: the former still called *Chusistan*, by the Arabian geographers, and *Susiana* by the Greeks, and *Cusha dwipa* within, by the Hindus. The other, called *Cusha dwipa* without. And the enterprizing *Cushim* or *Cuthim*, of Scripture, in Asia and Europe, assumed the title of *Getæ*, *Guiths*, and *Goths*; and of *Scuths*, *Scuits*, and *Scots*; and of *Sacas*, *Sacasenas*, and *Saxons*.

The original family settlement of *Abraham* was "*Ur* of the *Chasdim*," or Chaldees, Gen. xi. 28, who are repeatedly mentioned in Scripture; Isa. xiii. 9; Dan. ix. 1; &c. According to *Faber's* ingenious remark, it may more properly be pronounced *Chus-dim*, signifying "God-like *Cushites*." Vol. III. p. 435. It is highly improbable that they were so named from *Chesed*, Abraham's nephew, Gen. xxii. 22, who was a mere boy, if born at all, when *Abraham* left *Ur*, and was an obscure individual, never noticed afterwards.

Of *Cush's* sons, *Seba*, *Havilah*, *Sabtah*, *Sabtacha*, and *Raamah;* and the sons of *Raamah*, *Sheba*, and *Dedan*, seem to have settled in *Idumæa* and *Arabia*, from the similar names of places there: and of his descendants, *Nimrod*, the mighty hunter, first founded the kingdom of *Babylon*, and afterwards of *Assyria*, invading the settlements of the *Shemites*, contrary to the divine decree. His posterity were probably distinguished by the title of *Chusdim*. Isa. xxiii. 13.

2. The second son of *Ham* was *Misr*, or *Mizraim*. He settled in *Egypt*, whence the Egyptians were universally styled in Scripture, *Mizraim*, or *Mizraites*, in the plural form. But the country is denominated in the east, to this day, "the land of *Misr;*" which, therefore, seems to have been the name of the patriarch himself.

The children of *Misr*, like their father, are denominated in Scripture by the plural number. Of these, the *Ludim* and *Lehabim* were probably the Copto-Libyans; Ezek. xxx. 5: the *Naphtuhim* occupied the sea-coast, which by the Egyptians was called *Nephthus;* whence, probably, originated the name of the maritime god *Neptune*. Plut. de Isid. The *Pathrusim* occupied a part of lower Egypt, called from them *Pathros*. Is. xi. 11. The *Caphtorim* and the *Casluhim*, (whose descendants were the *Philistim* of *Palestine)* occupied the district which lies between the delta of the Nile and the southern extremity of *Palestine*. Deut. ii. 23. Amos ix. 7.

3. *Phut* is merely noticed, without any mention of his family. But the tribes of *Phut* and *Lud* are mentioned together, with *Cush*, or *Ethiopia;* Jer. xlvi. 9. Ezek. xxx. 5. And *Jerome* notices a district in *Libya*, called *Regio Phutensis*, or "the land of *Phut*."

4. *Canaan* has been noticed already; and the original extent of the land of *Canaan* is carefully marked by *Moses*. Its western border, along the *Mediterranean* Sea, extended from *Sidon*, southwards, to *Gaza;* its southern border from thence, eastwards, to *Sodom* and *Gomorrah*, *Admah* and *Zeboim*, the cities of the plain, afterwards covered by the Dead Sea, or Asphaltite Lake; its eastern border extending from thence, northwards, to *Laish*, *Dan*, or the springs of the *Jordan;* and its northern border, from thence to *Sidon*, westward. Of *Canaan's* sons, *Sidon*, the eldest, occupied the north-west corner, and built the town of that name, so early celebrated for her luxury and com-

merce in Scripture; Judg. xviii. 7; 1 Kings v. 6: and by *Homer*, who calls the *Sidonians*, *πολυδαιδαλοι*, "*skilled in many arts.*" Iliad. XXIII. 743; Odys. XV. 114, &c. And *Tyre*, so flourishing afterwards, though boasting of her own antiquity, Isa. xxiii. 7, is styled "a daughter of *Sidon*," or a colony from thence; Isa. v. 12.

Heth, his second son, and the *Hittites*, his descendants, appear to have settled in the south, near *Hebron*, Gen. xxiii. 3—7; and next to them, at *Jerusalem*, the *Jebusites*, or descendants of *Jebus*, both remaining in their original settlements till *David's* days; 2 Sam. xi. 3; v. 6—9. Beyond the *Jebusites*, were settled the *Emorites*, or *Amorites*, Numb. xiii. 29, who extended themselves beyond *Jordan*, and were the most powerful of the *Canaanite* tribes, Gen. xv. 16; Numb. xxi. 21; until they were destroyed by *Moses* and *Joshua*, with the rest of the devoted nations of *Canaan's* family.

III. *Shem* and his family are noticed last; Gen. x. 21—30. His posterity were confined to Middle *Asia*.

1. His son *Elam* appears to have been settled in *Elymais*, or Southern *Persia*, contiguous to the maritime tract of *Chusistan*. Dan. viii. 2.

2. His son *Ashur*, planted the land thence called *Assyria;* which soon became a province of the *Cushite*, or *Cuthic* empire, founded by *Nimrod.*

3. *Arphaxad*, through his grandson *Eber*, branched out into the two houses of *Peleg* and *Joktan.*

Peleg probably remained in *Chaldea*, or southern *Babylonia*, at the time of the dispersion; for there we find his grandson, *Terah*, and his family, settled, at "*Ur* of the *Chaldees*," Gen. xi. 31.

Of the numerous children of *Joktan*, it is said by *Moses*, that "their dwelling was from *Mesha*, as thou goest unto *Sephar*, a mount of the east." *Faber* is inclined to believe that they were the ancestors of the great body of the *Hindus*, who still retain a lively tradition of the patriarch *Shem*, *Shama*, or *Sharma;* and that the land of *Ophir*, abounding in gold, so called from one of the sons of *Joktan*, lay beyond the *Indus* eastward.

4. *Lud* was probably the father of the *Ludim* or *Lydians*, of Asia Minor: for this people had a tradition that they were descended from *Lud* or *Lydus*, according to *Josephus*, Ant. i. 6, 4.

5. The children of *Aram* planted the fertile country north of

Babylonia, called *Aram Naharaim*, "*Aram* between the two rivers," the *Euphrates* and *Tigris*, thence called by the Greeks, *Mesopotamia*, Gen. xxiv. 10. and *Padan Aram*, the level country of *Aram*, Gen. xxv. 20. This country of *Aram* is frequently rendered *Syria* in Scripture; Judges x. 6; Hosea xii. 12, &c.; which is not to be confounded with *Palestine Syria*; into which they afterwards spread themselves, still retaining their original name, of Αριμοι, or *Arameans*, noticed by *Homer*, Il. ii. 783.

The Confusion of Tongues at Babel.

This miraculous event, though recorded after the *Division of the Earth* among the families of *Noah's* sons, must have happened *before* it in the order of time: and it must have been *universal*, or equally affected them all; for the settlements of each of the three primitive families are said to have been, "after their *tongues*, in their lands or countries, in their nations." Gen. x. 5, 20, 31. And the account given of it, in the eleventh chapter, corresponds therewith. "And the *whole earth* was of one *lip* [or *language*,] and of *one speech*, [or *dialect*]. And it came to pass, as they journeyed from the *east*, that they found a plain in the land of *Shinar*, and they dwelt there. And they said, Come, let us build us a *city*, and a *tower*, whose top may reach into heaven; and let us make us a *name*, [or a sign] lest we be scattered abroad upon the face of the earth. And the Lord came down to see the city which the *children of men* builded. And the Lord said, Behold, the people is one, and they have all one lip, [or language], and this they begin to do; and now nothing will be restrained from them which they have imagined to do. Come, let us go down, and there confound their lip [or language] that they may not understand each other's lip, [or language]. So the Lord scattered them abroad from thence upon the face of the whole earth. And they left off to build the city. Therefore is the name of it called *Babel*, because the Lord did there *confound* the lip [or language] of all the earth." Gen. xi. 1—9.

From this concise account we may collect, that when the families of *Noah's* sons had sufficiently encreased in population, and the lower grounds were sufficiently dried, so as to require, or encourage emigration, they took their journey in one community, while they all spake the same language, and the same speech, tongue, or dialect, from the original settlement, in the

mountainous region of *Armenia*, to the fertile plain of *Shinar* in *Mesopotamia*. Here they settled themselves, with a firm determination not to separate from each other, in obedience to the divine decree; but to found a single universal empire. For that purpose, they proceeded to build a city, and a lofty tower. But God miraculously confounded their language, so that they were no longer intelligible to each other: and from *Babel* they were scattered over the face of the earth.

Respecting the particular route by which they arrived at the plain of *Shinar*, Scripture is silent: but the Chaldean historian, *Berosus*, informs us, that "they proceeded *circuitously* to *Babylonia* *." And Mr. *Penn* †, guided only by a geographical view of the country, happily conjectures, that they followed the course of the great river *Euphrates;* which rising in the mountains of *Armenia*, flows at first in a westerly direction; then it turns to the south, and at length, bending eastward, it reaches *Babylon* from the north-west. Its progress, therefore, is *circuitous;* and as the approach to *Shinar* would be most easily and naturally effected by following its winding course; so, in that case, the route of the emigrants would minutely correspond with *Berosus* and with Scripture, which represent them as travelling from the original settlement, *eastward* of the springs of the *Euphrates;* whose circuitous course, according to the ingenious remark of *Faber*, is described in the Sanscrit word *Uratta*, pronounced *Urat*, and signifying "a *circle;*" so nearly analogous to the Hebrew name of the river, *Phrat*. Origin of Idolatry, Vol. III. pp. 374—376.

The lofty tower which they built of bricks, burned and baked in the sun, and cemented with bitumen, was a pyramidal temple, of a quadrangular base, nearly of the same size of the great pyramid of Egypt, but somewhat loftier. The Tower of *Belus*, at *Babylon*, was probably the original Tower of *Babel*, built by *Nimrod*, and afterwards repaired by *Nebuchadnezzar*, and again ruined by *Xerxes*. See the following article of *Babylon*.

The prime author of this rebellion against the divine decree, and grand corrupter of the pure patriarchal religion, by *Sabaism* and *Demonolatry*, was the Cushite *Nimrod*, "the Rebel," as the

* Περιξ πορευθηναι εις Βαβυλωνιαν. Euseb. Chron. p. 8. Περιξ· κυκλῳ. Hesych.

† *Remarks on the Eastern Origination of Mankind*, by *Granville Penn*, Esq. Oriental Collect. Vol. II. Numb. 1 and 2.

name implies, who was afterwards deified himself, under the title of *Belus*, and supposed to be translated to the constellation *Orion*, in the heavens. See his history, Vol. II. of this work. And from the central region of *Babel*, this grand apostacy from the primitive faith seems to have been transplanted into the four quarters of the world; as proved from the remarkable fact of the general resemblance of the Pagan Mythology, in these its two leading outlines, in Asia, Africa, Europe, and America; and from the conformity between the leading doctrines of the primitive Pagan priesthood, the *Magi* in Chaldea, the *Brahmins* in the East, and the *Druids* in the West, as circumstantially proved by *Faber*, in his elaborate work.

That great linguist, Sir *William Jones*, in the *Asiatic Researches*, has discovered traces of three primeval languages, corresponding to the three grand aboriginal races, which he calls the *Arabic*, the *Sanscrit*, and the *Slavonic*, into which all others resolve themselves.

1. From the *Arabic* or *Chaldee*, spring the dialects used by the *Assyrians*, *Arabs*, and *Jews* *.

2. From the *Sanscrit*, which is radically different from the Arabic, spring the *Greek*, *Latin*, and *Celtic* dialects, though blended with another idiom, the *Persian*, the *Armenian*, and the old *Egyptian* or *Ethiopic* †.

3. From the *Sclavonic* or *Tartarian*, which again is radically different both from the Arabic and Sanscrit, spring (so far as Sir William can venture to pronounce upon so difficult a point) the various dialects of northern Asia, and north-eastern Europe ‡.

VARIETIES OF MANKIND.

The derivation of the human species, all from one stock, *Noah*, the second father of mankind, has proved a great stumbling-block to minute philosophers. "Though we cannot doubt the authority of *Moses*," says Lord *Kaims*, "yet his account of the creation of man is not a little puzzling, as it seems to contradict every one of the forementioned facts;" namely, the varieties of the human species in different countries, as to *colour*, *size*, *shape*, *disposition*, &c. *Sketches of the History of Man*, Vol. I. p. 36.

* Asiat. Research. Vol. II. p. 5. Vol. III. p. 419.
† Asiat. Research. Vol. I. p. 422. Vol. III. 15, 418, 419.
‡ Asiat. Research. Vol. II. p. 28, 29, 40. Vol. III. p. 419.

However inadequate we may be fully to unfold the mysteries of Nature, and the ways of Providence, yet much of these alleged varieties may be satisfactorily accounted for, from the influence of *climate*, local circumstances of *air*, *water*, *food*, *customs*, &c. which may, in process of time, make a material change in the constitutions and complexions of the inhabitants. If *dogs*, taken to the frigid zone, grow shaggy; and if *sheep*, transported to the torrid zone, exchange their wool for hair; why may not the human species gradually partake of the influence of climate?

1. Man was formed to reside in all climates.

"The human animal is the only one which is *naked*, and the only one which can *clothe* itself. This is one of the properties which renders him an animal of all climates and of all seasons. He can adapt the warmth or lightness of his covering to the temperature of his habitation. Had he been born with a fleece upon his back, although he might have been comforted by its warmth in high latitudes, it would have oppressed him by its weight and heat, as the species spread towards the Equator." This is the simple, but profound remark of *Paley*, *Natural Theology*, p. 231.

2. "Man, though *white* in Europe, *black* in Africa, *yellow* in Asia, and *red* in America, is still the same animal, tinged only with the colour of the climate. Where the heat is excessive, as in *Guinea* and *Senegal*, the people are perfectly black; where less excessive, as in *Abyssinia*, the people are less black; where it is more temperate, as in *Barbary* and in *Arabia*, they are brown; and where mild, as in *Europe* and in *Lesser Asia*, they are fair." *Buffon*, Tom. VI.—This concession from a great Naturalist and Sceptic, is important.

3. *Shaw*, in his travels through *Barbary*, found a tribe in the mountains of *Auress*, south of *Algiers*, who appeared to be a different race from the *Moors:* far from swarthy, their complexion is fair and ruddy, and their hair a deep yellow, instead of being dark, as among the neighbouring Moors. He conjectures, that they are a remnant of the *Vandals;* the tribe perhaps mentioned by *Procopius*, in his first book of the Vandalic War. And they probably retained their complexion, from their high, mountainous situation; as the natives of *Armenia*, in Western Asia, and *Cashmire*, in Eastern, are fair; owing to the great elevation of the soil in both places, and the temperature of the climate occasioned thereby.

4. On the other hand, a colony of *Jews*, settled at *Cochin*, upon the *Malabar* coast, from a very remote epoch, of which they have lost the memory; though originally a fair people in *Palestine;* and from their customs, preserving themselves unmixed, are grown as black as the other *Malabarians*, who are hardly a shade lighter than the negroes of *Guinea;* as we learn from *Hamilton*. And at *Ceylon*, the *Portuguese*, who settled there only a few centuries ago, are degenerated, and grown *blacker* than the original natives. They are in number about 5000, still speak Portuguese, wear the European dress, and profess the Romish religion. According to *Cordiner*, in his late *Description of Ceylon*, cited, *Antijacobin Review*, April, 1808, p. 345. *Moore* also, in his Account of the River *Gambia*, remarks, that the Portuguese, who settled near the *Mundingoes* about three centuries ago, differ so little from them, as to be called *Negros*. This they resent.

The late discoveries in the Tropical Isles of the great Pacific Ocean, seem to decide the question respecting the cause of the difference between the long-haired Asiatic Indians, and the woolly-headed African Negroes; whom *Herodotus* long ago described in his curious catalogue of the nations composing the immense army of *Xerxes*, under the names of "the Eastern and Western *Ethiopians*." B. 7.

Among the isles of the *New Hebrides*, Eastward of *New Holland*, the natives of *New Caledonia*, 21. deg. South lat. are of a swarthy colour, their hair crisped, but not very woolly, their faces round, with thick lips, and wide mouths. The natives of *Tanna*, 19 deg. S. L. are almost of the same swarthy colour: their hair and beards were black and crisp in general, and in some, woolly. The natives of *Millicollo*, 17 deg. S. L. border the nearest upon the tribe of monkeys. The hair of most of them is frizzled and woolly, their complexion sooty, their features hard, the cheekbones and face, broad. The natives of *Egmont* Island, 10½ deg. S. L. are black, and woolly headed. Captain *Carteret* found a young man, near the neighbouring isle of *Trevanion*, "with a woolly head, like that of the Negroes, and a small beard; but he was well featured, and not so black as the natives of Guinea: he was of the common stature, and like all the rest of the people we had seen upon this Island, quite naked." *Carteret's* Voyage, p. 580.

The situation of these Isles, in East longit. 165 degrees, and

130 degrees distant from the coast of *Guinea*, or *Negroland*, in the direct line, and more than half the globe, along the coasts of Africa and Asia, furnishes the most decisive evidence that they never had, nor could have, any connexion with those countries, the inhabitants of which they yet so strongly resemble in their peculiar features. They were unquestionably colonized from Asia, by the *Malayans*, those *Phœnicians* of the Oriental world; whose language is found to prevail through all the various clusters of the Tropical Isles, from *Madagascar* westwards, near the African Coast, to the remotest of Captain *Cook's* discoveries, the *Marquesas* and *Easter* Island, towards South America; throughout a tract of near 200 degrees of longitude! A wider field than the *Latin*, or any other tongue, has ever boasted of. See the masterly Introduction to Cook's last Voyage, p. lxxii.

Still, however, there are anomalies, or exceptions, to these general conclusions of the influence of *climate* and *customs*, that must be ascribed to other, and perhaps undiscovered causes, which baffle the pride of human sagacity to develope; and which, after all, must be resolved into the will and pleasure of the CREATOR, and deposited among "the unsearchable riches" of his wisdom and providence, in the *variety*, no less than in the *regularity*, of his works.

1. Such, for instance, is the uncommon fairness of the inhabitants of *Guayaquil*, in *Peru*, only two degrees removed from the line. Though the heat here is equal to that of *Panama*, or *Carthagena*, yet the climate distinguishes itself in the colour of the human species. And if a certain author has styled it, "*the Equinoctial Low Countries*," in allusion to the resemblance it bears to the *Netherlands* of Europe, it may with equal propriety bear that appellation from this singularity: namely, that all the *natives*, except those born from a mixture of blood, are fresh coloured, and so finely featured, as to be justly styled the handsomest both in the province of *Quito*, and even in all *Peru*.

Two things are here the more remarkable, as being contrary to common observation; one, that notwithstanding the heat of the climate, its *natives* are not tawny; the other, that though the *Spaniards* have not naturally so fair a complexion as the Northern nations, their children born here of *Spanish* women are very fair. To attribute it to the *effluvia* exhaling from the contiguous river, appears to me little satisfactory; other cities have the same advantageous situation, without producing any

improvement in the complexion of the inhabitants; whereas here, *fair* persons are the most common; and the *children* have universally *light hair* and *eye-brows*, and very *beautiful faces*. This phænomenon has not hitherto been sufficiently explained :" according to that intelligent and scientific traveller, *Ulloa*, Vol. I. p. 141.

2. Another as remarkable anomaly prevails at the other extremity of *South America*, on the Eastern coast of *Patagonia*, bordering on the entrance into the Streights of *Magellan*. Commodore *Byron*, and Captains *Carteret* and *Wallis*, in two successive voyages, found a description of Natives, to the amount of 500, the first time, in 1764; and some hundreds, the second, in 1766; among whom they appeared as "pigmies among giants." *Wallis*, who measured the tallest of the *Patagonians*, found one of them "six feet seven inches high; several more were six feet five, and six feet six inches; but the stature of the greater part of them was from five feet ten to six feet. They are well made, robust, and bony; but their hands and feet are remarkably small. Their complexion is a dark copper colour, like that of the *Indians* in North America: their hair is strait, and nearly as harsh as hog's bristles: it is tied back with a cotton string. Several, both men and women, were on horseback. Their horses appeared to be well made, and nimble, and were about 14 hands high. The women rode astride, and both men and women without stirrups; yet they gallopped fearlessly over the spit upon which we landed, the stones of which were large, loose, and slippery." Cook's first Voyage, Vol. I. p. 26—32; 375—380. Descriptions, so circumstantial, and so well attested, place beyond the reach of doubt or cavil. the existence of this populous race of giants, in 52 degrees of South latitude, and in a cold climate; which is thus described by Captain *Wallis*:

"Thus we quitted a dreary and inhospitable region, where we were in almost perpetual danger of shipwreck, for near four months, having entered the Streight of *Magellan* on the 17th of December, 1766, and quitted it on the 11th of April, 1767; a region where, in the *midst of summer* *, the weather was cold,

* Commodore *Byron* advanced into the Streights of *Magellan*, as far as Cape *Forward*, the Southern extremity of the Continent, in lat. 54. There, on December 24, 1764, about their Summer solstice, he found the weather cold, and the air keen; and walking across the Cape, the hills, as far as he could see, were of an immense height, very craggy, and covered with snow, quite from the summit to the base. Vol. I. p. 36—39.

gloomy, and tempestuous, where several of the summits of the mountains were covered with snow, and others rose towering above the clouds in vast crags, piled upon each other, exhibiting more the appearance of chaos than of nature; and where, for the most part, the vallies were without herbage, and the hills without wood." P. 383—409.

How different are these *Patagonians* from the stunted *Laplanders* of *Europe*, and the *Esquimaux* of *North America*, in similar climates; contradicting the general theory of the decrease of the human stature as we approach the frigid zones.

If the following observation of *Bruce* be well founded, the predominance of *white*, as the original complexion, over the *black*, seems to be ascertained.

"The royal family in *Abyssinia* were originally *negroes*, and remain so still, when their mothers have been black like themselves: but where the king has happened to marry an *Arab* woman, as he often does, the black colour of the father cedes to the white of the mother, and the child is white. The last *Baady* (or king) who was slain at *Teawa*, was a perfect negro; and by a slave from his own country, he had the late king, *Nasser*, who, like his father, was a perfect black: by an Arab, of the tribe of *Daveina*, he had *Ismain*, the present king, who is white. And so it has invariably happened in the royal family, as well as in private ones. But what is still more extraordinary, though equally true, an *Arab*, who is white, marrying a black woman slave, has infallibly white children. I will not say that this is so universal as that an example of the contrary may not be found; but *all the instances I happened to see, confirmed this.*" *Bruce*, Travels, Vol. V. p. 223.

In Captain *Cook's* first voyage, during his stay at *Success* Bay, lat. 54, 45′, on the Eastern coast of *Terra del Fuego*, in the Streights of *Le Maire*, a party, consisting of Mr. *Banks*, Doctor *Solander*, and ten more, went to visit a mountain, at some distance, in search of plants, on January 16, 1769; but were surprised there by a sudden snow-storm, attended with piercing cold; in which they were all nearly lost: two of their party were frozen to death, and the rest, with great difficulty, found their way back to the ship next day.

Such a phænomenon, about their midsummer, is unknown in the Northern hemisphere, at the corresponding season, even in the higher latitudes of *Norway* and *Lapland*. And yet, notwithstanding, Captain *Cook*, describing the natives of *Terra del Fuego*, says, "The men are large and clumsily built, their stature is from five feet eight to five feet ten. The women indeed are much smaller, few of them being more than five feet. We saw no appearance of their having any food but *shell-fish*. These are gathered by the women, at low water." Vol. II. p. 46—56.

An ingenious, but fanciful writer, the late Mr. *King*, in his *Morsels of Criticism*, Vol. III. 87, 93, &c. revived the long-exploded scheme of *Peyrerius*, adopted by *Blunt*, in his *Oracles of Reason;* namely, that of the *Præ-Adamites*, or an inferior race, or caste, created before *Adam* and *Eve;* with whom *Cain* intermarried, and produced a black progeny; some of whom, surviving the deluge, propagated the species afterwards! But nothing can be more express than the Scripture-account of the total and absolute destruction of "*all* mankind," and "*every*" man, by the deluge, except *Noah's* family. Gen. vii. 21—23. And, indeed, to suppose that "*some* persons might escape on floating *trees* or *timber*, or on the summits of *mountains*, (from which the water *soon* flowed off) or by *other extraordinary means*—as men sometimes escape and are preserved, from a wreck at sea,"—evinces the height of credulity, and would be a miracle greater than the deluge itself.

THE PRIMITIVE LANGUAGE.

Which was the primitive language? and *wherein did the confusion of tongues consist?* These are curious and interesting questions, more easy to propose than to resolve. None, therefore, have been more warmly disputed by antiquarian philologists; and the *Hebrew*, *Syriac*, *Arabic*, *Chaldee*, *Phœnician*, *Egyptian*, *Ethiopic*, *Greek*, *Sanscrit*, and *Chinese*, have each had their respective advocates for the palm of priority and precedence.

Of these various claimants, the language spoken by the inhabitants of the first districts occupied by *Noah's* family, after the flood, seem to have the fairest pretensions to originality, or rather of affinity to the primitive language, supposing all to be altered, more or less, by lapse of time and change of place.

> ——— Mortalia *facta* peribunt,
> Nedum *sermonum* stet honos, et gratia vivax.—Hor.

The great affinity that still reigns, at the present day, among the kindred dialects of the east, and the remoter of the west, lead us to suspect, that the confusion of tongues consisted rather in diversity of pronunciation of the same words, than in the introduction of new words expressing the same ideas.

If these assumptions be valid, the *Hebrew* and the *Syriac*

have the fairest pretensions to originality; and they accordingly have been patronized by the most skilful orientalists, and a decided preference given to them above the rest.

That this preference is well founded, may perhaps be most simply and satisfactorily proved from their respective alphabets; for the *names* and the *numeral* values of the *Hebrew* and *Syriac* letters, which agree together, are almost generally adopted in the rest, however unlike the letters themselves may be in their respective shapes.

Thus, the names of the *Hebrew* and *Syriac* letters, *Aleph*, *Beth*, &c. have been adopted, with some slight variations, by the *Arabians*, *Persians*, *Copts*, *Ethiopians*, *Greeks*, &c. But whatever dislocations may have arisen in the order of the letters of each respective alphabet, yet it is truly remarkable, that, for the most part, in the kindred dialects they still retain the same *numeral* powers as in the primitive alphabets.

From inspection of the several alphabets, it appears, that only the two first letters of the *Hebrew* and *Syriac* alphabets, *Aleph* and *Beth*, retain their primitive order in the other dialects, and also their numeral powers. Thus, the third Arabic letter *Ta*, retains both the name *Thau*, and the numeral value 400, of the last letter of the Hebrew and Syriac alphabets; the fifth Arabic letter, *Jim*, corresponding to the third Hebrew *Gimel*, retains its proper value, 3; the sixth *Hha*, corresponding to the eighth Hebrew *Hheth*, retains its proper value, 8; while the twenty-eighth and last Arabic letter *Ya* or *Ia*, corresponding to the tenth Hebrew letter, *Iod*, still retains its proper value, 10.

This furnishes demonstrative evidence of the dislocation of the present *Arabic* alphabet *; and, consequently, that it must have deviated from the primitive alphabet, as well in the order and power, as in the form of its several letters. The same argument will apply to the other alphabets, which are still more modern than the Arabic, the *Ethiopic*, the *Sanscrit*, &c.

To this we may add, that the superior simplicity of the *Hebrew* and *Syriac* letters, which originally had each only one form, decides their superior antiquity also above the *Arabic*, the *Ethiopic*, the *Sanscrit*, &c. alphabets, in which each letter has a distinct form, at the beginning, middle, and end of words,

* The *Arabic* alphabet was originally the same as the *Syriac*; a change was made in the order of the alphabet, and character of the letters, about the age of *Mahomet*.

to the great embarrassment of learners, and sometimes even of adepts.

The *Hebrew* language also furnishes internal evidence of its priority before the other dialects, and of their descent from it.

1. In the original nomenclature, *Adam* called his wife אשה *(Aishah)* "Woman," because she was taken out of איש *(Aish)* "Man." Gen. ii. 23. Here the derivation is obvious in the Hebrew language, but the resemblance is lost in the ancient versions. Though the derivation of אתתא, in *Chaldee*, or איתתא, in *Syriac*, *(Aitta)* "Woman," from the Hebrew, *Aishah*, (by the usual and frequent interchange of the letter ש *Shin*, and ת *Thau*, both in the eastern and western dialects) is obvious, yet the primitive Hebrew root, איש, *Aish*, "Man," is not now found in these dialects, but has grown obsolete; and in its stead, the *Chaldee* has substituted בעל *(Baal)* "Master," the *Syriac*, גברא *(Gebura)* "the strong."

2. From the primitive name of God in Hebrew, אל (ÆL) signifying "power," was obviously derived אלוה (ÆLOH) in Hebrew, signifying "potentate;" ALAH, in *Syriac;* AL-ALAH (or, by contraction of the article *Al*, "the," prefixed) ALLAH, in *Arabic;* ULLAH, in *Ethiopic;* ALOH, in the *South Sea Islands*, where Captain *Cook* found ALO ALO, the name of the Supreme God, in *Hapaee*, one of the Friendly Isles, similar to the Hebrew, ÆL ÆLOHIM, "God of gods."

3. The Hebrew שק *(Sak)* "a bag," pervades most of the eastern and western languages, precisely in the same sound and sense. The Hebrew מת *(Math)* "dead," runs through all the Oriental dialects*; and *Mat*, or *Matte*, is found in the vocabularies of the *South Sea Isles* exactly in the same sense. The same may be observed of many other words.

4. The primitive proper names of *Rivers*, *Mountains*, *Cities*, *Persons*, &c. throughout the east, are all deducible from the Hebrew.

5. When *Abraham*, "the *Hebrew*," travelled through *Palestine* and *Egypt*, he appeared to be easily understood in all these countries, without the aid of an interpreter, and freely conversed with *Melchizedek*, *Abimelech*, *Pharaoh*, &c.

6. When *Laban* called the pillar, erected in memory of his

* Hence the *Arabic* phrase in the game of chess, *Cheik Mat*, "the king is dead." It is also the name of a place near *Arbela*, in *Assyria* Proper.

convention with *Jacob*, in Syriac, יגר סהדותא, *Jegar Sahadutha*, which *Jacob* called גל עד, *Gal-eed*, in Hebrew, Gen. xxxi. 47. they are synonymous phrases, as "*the mount of testimony*," and "*the heap of witness*," in English.

The formation of the nearer dialects of the east, and remoter of the west, from the primitive language, by change of vowels, and interchange of consonants of the same or kindred organs of speech, may be aptly illustrated by a few instances, ancient and modern.

1. The primitive name of Lower Egypt was אי כפתור, *Ai Caphtor* *, or "the covered land," Jer. xlvii. 4; because, according to *Herodotus*, "the *Delta* was originally a marsh covered with water, and so was all the Lower Egypt, as far as Mount *Masius*, and the *Sirbonic* lake." Hence, by elision, came *Ai-capht*, or *Ai-copht;* and by transmutation, *Aigupt;* whence our English word *Egypt*, retaining only the two last original letters. In *Sanscrit*, it is called *Gupta-sthan*, "the covered land;" and *Cardama-sthan*, "the mud-land." *Wilford* on *Egypt* and the *Nile*. *Asiat. Research*. Vol. III. p. 335.

2. From the Greek Επισκοπος, by elision, came *Piscop*, and thence the English *Bishop;* or *Episk*, whence the French *Evêque*.

3. From the Latin, *Dies*, came the adjective *Diurnus*, from thence the Italian, *Giorno;* whence the French, *Jour*, "day;" not retaining a single letter of the original word.

ALPHABETICAL AND HIEROGLYPHICAL WRITING.

An hypothesis seems to be pretty generally prevalent among antiquaries, that *hieroglyphical* was earlier, and that it gave rise to the invention of *alphabetical* writing, by contraction of the hieroglyphic symbols into alphabetical letters.

In favour of this hypothesis, it has been asserted, that the letters of the primitive alphabet were originally intended for symbols of the things whose names they bear; as *Aleph*, "an ox," *Beth*, "a house," *Gimel*, "a camel," *Daleth*, "a door," &c. but in process of time were curtailed and reduced to simpler forms.

* The Egyptian word *Caphtor*, is evidently derived from the Hebrew, כפר, *Caphar*, "to cover," which is the root of the English word, also.

1. This however may be doubted: for as the learned orientalist *Schultens* remarks, "the names given to the primitive letters were rather designed as *artificial helps of the memory*, to excite the attention of learners," by means of the alliteration; as our spelling-books for children contain cuts or figures, in which A is connected in the same compartment with an *Ass*, B with a *Bear*, C with a *Cat*, D with a *Dog*, &c. without the remotest likeness between the letters and the objects themselves, intended to be conveyed or understood.

2. The original structure of *hieroglyphical* symbols, and of *alphabetical* letters, seems to be totally and radically different, and incapable of transmutation into each other. *Hieroglyphics* are imperfect outlines of the figures or objects themselves intended to be represented, which, in process of time, were transferred from sensible objects to intellectual, by a *metaphorical* language; whereas, *letters* are arbitrary *marks* of a few simple elementary *sounds* of the easiest and readiest pronunciation, to which they bear no manner of resemblance; and the progress of writing, like that of oral language, is from *monosyllables* to *dissyllables*; from thence to *trisyllables*; and so on to *polysyllables*: thus, by their various combinations, forming all that endless variety of oral or of written words, which serve to communicate ideas or notions. If the origin of *language*, or articulate speech, was divine, how much more the invention of *writing*, of alphabetical letters, and written words!

> "Those wondrous symbols that can still retain
> The phantom forms that pass along the brain;
> O'er unsubstantial thought hold strong controul,
> And fix the essence of the immortal soul!"
>
> M'CREERY'S *Press*.

Which, by the magic spells of a few cabalistical characters, grouped together in various clusters, can fix and embody, as it were, fleeting sounds and perishable ideas, with which they have no natural union or connection whatsoever, and embalm or preserve them to ages yet unborn!

3. Notwithstanding this, the author of the account of the late *Embassy to China*, Sir *George Staunton*, endeavours to uphold the fashionable hypothesis, from the introduction of an alphabetical mode of writing in *China*, by the British factors at *Canton*, for convenience of communication with the *Chinese* merchants, founded on their hieroglyphical writing.

"On account," says he, "of the vast concourse of persons using the *English* language, who resort to *Canton*, a vocabulary of English words has been published in *Chinese* characters merely expressive of sound, [or of the English pronunciation] for the use of the native merchants concerned in the trade. To each character is annexed a mark, to denote that it is not intended to denote the [*Chinese*] idea, but merely the *foreign* sound attached to it. The habit of applying the sound instead of the meaning of hieroglyphics, [may have] led to the application of them likewise as sounds, to assist the memory in the pronunciation of other hieroglyphics *in the same language*, but not in common use; and this repeated application of them, for the same purpose, may be at length supposed to have *effaced their original use*."

"Thus the passage from *hieroglyphic alphabetic* writing may naturally be traced, without the necessity of having recourse to *Divine instruction*, as some learned men have conjectured, on the ground that the art of writing by an alphabet is *too refined and artificial for untutored reason*."

"It is indeed," concludes he, "equally natural to suppose, that no such art *could* have preceded the establishment of *hieroglyphic*, or that a mixture of other nations *superinduced* the invention of *alphabetic* language."

The drift of this hypothesis, so freely and openly avowed by its patron,—to exclude the necessity of *Divine instruction*,—would lead us to distrust his reasons, were they even more specious: but they are evidently insufficient: for, 1. It will appear, from the whole tenor of ancient history, both sacred and profane, that the art of alphabetical writing not only *could*, but actually *did*, precede the establishment of hieroglyphic; and 2. That the invention of alphabetic language was not *superinduced* by a mixture of other nations, nor *could* it be so superinduced.

1. "The *book* of the genealogy" of the antediluvian patriarchs from *Adam* to *Noah*, is evidently represented as a *written* record, Gen. v. 1. And indeed how could it possibly record their *names*, and their *generations*, *residues of life*, and total *ages*, without written *words*? How could *oral* tradition hand down, through two and twenty centuries to the deluge, unimpaired, thirty large and unconnected numbers, rising from a hundred to near a thousand years?

2. Some Jewish and Oriental traditions ascribe the invention of

writing to *Seth*, the son of *Adam;* others to *Enoch*, the seventh from *Adam;* whether well founded, or not, it proves the prevailing opinion, that letters were of antediluvian date.

3. And Western tradition affirms the same. *Pliny* says, *Literas semper* arbitror *Assyrias* fuisse. "I am of opinion that *letters* were *always* found among the *Assyrians*." The term *semper*, "always," is emphatic, and marks *from the beginning of the world.* Nat. Hist. 7, 56.

4. *Cicero* confirms the opinion of *Pliny*, and assigns an additional reason for it; namely, that the *Assyrians* were much addicted to astronomy, and therefore required the art of writing to *record their observations* *.

5. The first numeral characters in use were the letters of the primitive alphabet; their introduction, therefore, as letters, must have been prior to their designation of numbers.

On the other hand,

6. *Gaspar Samedo* expressly asserts, from the *Chinese* annals, that *hieroglyphic* symbols were first introduced into *China* only 3700 years before he wrote, in A.D. 1640; or about B.C. 2060, which was upwards of a thousand years after the deluge.

7. *Tacitus* attributes the invention of *hieroglyphics* to the *Egyptians:*—Primi per figuras animalium *Ægyptii* sensus mentis effingebant. Annal. 11, 14. And the learned *Needham* has endeavoured to trace a resemblance between the *Egyptian* and *Chinese* hieroglyphics. And indeed it is recorded by *Herodotus* and *Diodorus*, that the great pyramids near *Memphis* abounded both with *hieroglyphics*, and also *written* inscriptions, recording the number of workmen employed, their expences, &c.

8. By a fortunate discovery, a stone has been recently brought from Egypt to England, on which is a triple inscription in hieroglyphic symbols, in alphabetical Egyptian letters, and lastly, an explanation of both in Greek, which may furnish a clue to decypher the rest.

From these observations, we may fairly collect, that the *hieroglyphic* symbols formed the *sacred character* of the Egyptian priests, who thereby veiled their discoveries from the vulgar and uninitiated; and consequently, that they were in reality long

* Principio *Assyrii* (ut ab *ultimis* auctoritatem referam) propter planiciem magnitudinemque regionum quas incolebant, cum cœlum ex omni parte patens atque apertum intuerentur, trajectiones motusque stellarum observarunt: *quibus notatis*, quid cuique significaretur, *memoriæ* prodiderunt. *De Divinat.* 1, 1.

posterior to the use of alphabetical writing, which was often subjoined by way of explanation, and probably not earlier than B.C. 2095, in *Egypt*, and B.C. 2060, in *China*.

The second presumptive argument, "that a mixture of other nations *superinduced* the invention of alphabetical language," is equally contradicted by experience.

1. Ever since the first introduction of hieroglyphics into *China*, the labours of their literati have been spent in classing and contracting their symbols, and extending their system; and the curious and scientific nature of their classification into genera and species, by characteristic marks *, is much commended by Sir *George Staunton*. The whole number amounts to about 80,000 distinct symbols. Few of their scholars, however, know more than twenty or thirty thousand, and the generality are satisfied with about ten thousand.

In consequence also of "the insensible deviation of these characters from their primitive shapes," in the lapse of ages, some of their most ancient books, as the *Shuking*, are now almost obsolete, and unintelligible to their most skilful and sagacious grammarians. See *Sablier's Essai sur les Langues*, 1778, Paris.

And yet so wedded are the Chinese literati to their own awk-

* The following extract from an ancient Chinese writer, *Li yang ping*, given by Sir *William Jones*, in the *Asiatic Researches*, Vol. II. p. 195, is curious, and throws light on the nature and construction of *Chinese* hieroglyphics:—

"The ancient characters used in *China* were the outlines of visible objects, terrestrial and celestial; but as things merely intellectual could not be expressed by these figures, the grammarians contrived to represent the various operations of the mind by *metaphors*, drawn from the productions of nature. Thus the idea of *roughness* and of *rotundity*, of *motion* and *rest*, were conveyed to the eye by signs representing a *mountain*, the *sky*, a *river*, and the *earth*; the figures of the *sun* and *moon*, and the *stars*, differently combined, stood for *smoothness* and *splendour*, for any thing *artfully wrought*, or *woven with delicate workmanship*. *Extension*, *growth*, *increase*, and many other qualities, were painted in characters taken from the *clouds*, from the *firmament*, and from the *vegetable* part of the creation; the different ways of moving, *agility* and *slowness*, were expressed by various *insects*, *birds*, *fish*, and *quadrupeds*. In this manner, *passions* and *sentiments* were expressed by the pencil, and ideas, not subject to any sense, were exhibited to the sight; until, by degrees, new combinations were invented, new expressions added, the characters deviated insensibly from their primitive shape, and the *Chinese* language became not only clear and forcible, but rich and elegant in the highest degree."

How it was possible for a language to be "*clear*," precise, or distinct, where literal and figurative meanings of the symbols, applied with great variety and latitude, were so apt to be confounded and mistaken for each other, is difficult to conceive. See a *Chinese* Ode in the original, *Asiat. Research.* Vol. II. p. 273, and its literal translation and paraphrase, p. 199.

ward and embarrassing symbols, which can only be decyphered, not read; exhibiting a string of disjointed *metaphors*, without connecting *verbs* or *particles*, piled on each other like a wall of loose stones, without mortar or cement, that they still obstinately reject the inestimable advantages of alphabetical writing, which they might easily have learned from the *European* missionaries resident among them for some centuries past. The mercantile expedient for conveying English words by means of Chinese sounds expressed in their hieroglyphics, upon which Sir *George Staunton* builds so much, is foreign to the purpose, for it is neither pure hieroglyphic, nor alphabetical writing, but a mongrel species between both, and never can lead to the invention of the latter, from which it is so radically and essentially different. And it is strange, how this writer could be so blinded, by his sceptical prejudices against the *Mosaic* history, as to imagine that it could ever lead thereto; especially among such a people as the *Chinese*, the jealous policy of whose government prevents their intermixture with Europeans in general; and the pride of whose Mandarins, through an affectation of concealing their knowledge, probably occasioned at first their neglect of alphabetical writing, which they might have once known, but gradually lost, and their preference of the more mysterious and recondite mode of hieroglyphical.

The learned *Brotier* profoundly observes, " Writing diverged from *Assyria* to all those nations, who either through *rusticity* did not neglect, or through *vanity* did not despise, this excellent invention. Two nations, the *Egyptians* and *Chinese*, between whom *Assyria* lay, and who were both exceedingly alike in vices and virtues, seem to have laboured under this sort of pride. But their pride turned to the punishment of both: the stupendous monuments of the *Egyptians* are become unknown and obsolete; the *Chinese*, always children, grow old together in decyphering their characters." *Brotier's Tacitus*, Vol. II. p. 341, Note.

EGYPT.

This country seems to have attained an earlier and a higher degree of civilization and refinement than any other in the world. Even in *Abraham's* days, we find it the seat of a royal government, and a princely court, abounding with provisions, while the neighbouring countries, and even the fertile regions of

Palestine, were exposed to frequent famines. Gen. xii. 10. In his grandson *Jacob's* time, there was a settled caravan trade carried on through *Palestine,* from *Arabia* and the east, for spicery, balm, and myrrh, and probably also for slaves. Gen. xxxvii. 25. Its superior fertility, indeed, was occasioned by the annual inundation of the Nile, and the irrigation of their lands. Deut. xi. 10.

The length of Egypt was very disproportionate to its breadth: its extent, from the mouths of the Nile to *Syene,* the border of *Nubia,* under the tropic of Cancer, was about 500 miles; but it was little wider than the valley through which the Nile ran in *Upper Egypt,* until it reached the *Lower Egypt,* at some distance above the head or vertex of the *Delta,* where the valley expanded itself. The Upper Egypt, or *Thebaid,* seems to be called PATHROS in Scripture, as distinguished from the Lower, properly called CAPHTOR, or Egypt. Compare Isa. xi. 11. with Ezek. xxix. 14; and Jer. xliv. 1. with Ezek. xxx. 14—16. Deut. ii. 23; Jer. xlvii. 4.

THE LAND OF GOSHEN.

This was the most fertile pasture-ground in the whole of Lower Egypt: thence called *Goshen,* from *Gush,* in Arabic, signifying "a heart," or whatsoever is choice or precious. There was also a *Goshen* in the territory of the tribe of *Judah,* so called for the same reason. Josh. x. 41. Hence *Joseph* recommended it to his family as "the *best* of the land," Gen. xlvii. 11. and "the *fat* of the land," Gen. xlv. 18.

The land of *Goshen* lay along the most easterly branch of the Nile, and on the east side of it; for it is evident, that at the time of the Exode, the *Israelites* did not cross the Nile. In ancient times, the *fertile* land was considerably more extensive, both in length and breadth, than at present, in consequence of the general failure of the eastern branches of the *Nile;* the main body of the river verging more and more to the west continually, and deepening the channels on that side. *Rennel's Herod.* p. 537.

ZOAN, OR TANIS.

This appears to have been an ancient city. To raise the antiquity of *Kiriath-Arba,* or *Hebron,* the chief residence of *Abraham* and his family, it is said to have been built "seven years before *Zoan.*" Numb. xiii. 22. It was one of the royal cities, for

the plagues of Egypt were inflicted "in the field of *Zoan*." Psalm lxxviii. 12. And it continued perhaps to be a seat of government even in *Isaiah's* time. "Surely the princes of *Zoan* are fools; the counsel of the wise counsellors of *Pharaoh* is become brutish." Isa. xix. 11. צען, *Tsoan*, is constantly rendered by the Septuagint, *Tanin*, or *Tanis;* according to the same analogy that *Tsur* was called Τυρ-ος, or *Tyre*, by the Greeks. But *Tanis* was situated near the mouth of the second branch of the Nile, next the *Pelusiac*, thence called the *Tanitic*.

On, or Heliopolis.

The father-in-law of *Joseph* was high-priest of *On*, Gen. xli. 45; there rendered, *Heliopolis*, by the Septuagint version, and noticed also by *Herodotus;* who says, that "the *Heliopolitans* were reckoned the *wisest* of the Egyptians." This was the city of *Moses*, according to *Berosus;* and well accounts for his scriptural character, that "he was learned in all *the wisdom* of the Egyptians." Acts vii. 22. *Heliopolis* was the Greek translation of *Beth-shemesh*, "the house, or city of the Sun," as it was called by *Jeremiah*, "*Bethshemesh*, in the land of Egypt" (xliii. 13.), to distinguish it from another *Beth-shemesh*, in the land of *Canaan*. It was nicknamed *Beth Aven*, "the house of vanity," or idolatry, by the Jews, Ezek. xxx. 17. from *Bethel*, where *Jeroboam* erected one of the golden calves; thence called *Beth-aven*, Hos. x. 5. *Aun*, or *On*, and *Aven*, being only different pronunciations of the same Hebrew word, און, according as *Vau*, the middle letter, was sounded as a vowel, O or U, or as a consonant V. This city was probably near the royal city *Zoan*, and only fifteen stadia from the sea, according to *Herodotus*.

Rameses.

Benjamin of Tudela, in the twelfth century, was informed by the Egyptian Jews, that this was the same as *Heliopolis;* but *Niebuhr* thinks that *Rameses* lay to the north-west of it, where there is a heap of ruins, about four leagues from *Kahira*, or *Cairo*, in the way to *Suez*, called *Tel el Jhûd*, or *Tourbet el Jhûd*. *Descript. de l'Arabie*, p. 351. *Rameses* was in the land of *Goshen*, called also "the land of *Rameses*." Gen. xlvii. 11.

Sin, or Pelusium.

Sin, in Arabic, signifies "mud," and was therefore the same

as *Pelusium*, from πηλος, "mud." *Ezekiel* styles *Sin*, "the strength of Egypt," (xxx. 15.) and *Suidas*, "the key of Egypt," or its strong barrier on the side of *Syria* and *Arabia*. Near it, southwards, was

PIBESETH, OR BUBASTUS.

Mentioned in the neighbourhood of *On*, or *Aven*, by Ezekiel (xxx. 17.) which was the *Bubastus* of the Greeks; whence the eastern branch of the Nile was indiscriminately called the *Bubastic*, or the *Pelusiac*.

TAHAHPANES, TAHPANES, OR HANES,

Was the same as *Daphnæ Pelusiacæ*, noticed by *Herodotus*. Here the prophet *Jeremiah* resided in his exile, (xliii. 8.) *Isaiah* abridged it to *Hanes*, (xxx. 4.)

MIGDOL.

This word signifies "a tower," and was a frontier town of Lower Egypt, towards the Red Sea, between which and that sea the *Israelites* encamped, Exod. xiv. 1. It is there rendered by the Septuagint *Magdolus*: and there also *Herodotus* represents *Nekus*, or *Pharaoh Necho*, as gaining a great victory over the *Jews*, when *Josiah* was killed; mistaking *Magdolus* for *Megiddo*. Jeremiah represents it as belonging to *Egypt* Proper, (xlvi. 14.) and in the neighbourhood of *Tahpanes*, or *Daphnæ*. The itinerary of *Antoninus* reckons it a little to the south of the *Delta*, about twelve miles from *Pelusium*.

NOPH, MENOPH, OR MEMPHIS.

This great city lay somewhat above the vertex of the *Delta*, or parting of the channels of the Nile, upon quitting Upper Egypt. It is called by the Arabs at the present day, *Menoph*, whence *Memphis*, which is the Septuagint rendering of *Noph*, in Jer. xlvi. 14. and elsewhere.

The founder of *Memphis*, according to *Herodotus*, was *Menes*, the first king of Egypt, who turned the channel of the river, and built the city in the ancient bed, where the streight between the *Arabian* and *Libyan* mountains is narrowest. B. ii. It was probably, therefore, the most ancient city of Lower Egypt, and older than *Zoan*, or *Tanis*; which probably was not recovered from the sea till a good while after. *Herodotus* thought that the

valley above *Memphis*, where it widens, was once a bay of the sea, but was gradually raised by the alluvions of the *Nile;* which also, in his opinion, formed the *Delta.* And this tends strongly to confirm the opinion, that the *Mediterranean* was once much higher than at present, and that it was lowered by the disruption of the streights of *Gibraltar.*

The learned Doctor *Shaw*, in his Geographical Observations on *Egypt*, p. 341, combats the opinion of *Bochart*, that *Zoan* was the residence of *Pharaoh*, during the plagues of Egypt, from the local circumstance of "a strong *west* wind blowing the locusts into the *Red Sea;*" (Exod. x. 19.) which, says he, agrees better to the site of *Memphis*, which lay westward of the *Red Sea;* whereas a westerly wind from *Zoan* would blow them into the Mediterranean, or else into the land of the *Philistines.* But the original, *Ruah Yam*, is "a sea wind," or a wind blowing from the *Mediterranean*, and was therefore rather a northerly wind, which would answer much better to *Zoan*, near the sea, than to *Memphis*, inland; and was also better adapted to drive the locusts along the Red Sea rather lengthwise than across it, and so more completely immerge them therein.

But why might not both have been royal cities, even allowing *Memphis* to have been the capital? *Pharaoh* had cattle in the land of *Goshen*, (Gen. xlvii. 6.) which was in the neighbourhood of *Zoan;* and "the princes of *Zoan*," and "the princes of *Noph*," are both classed together as "fools" or idolaters. Isa. xix. 13. *Zoan* perhaps might have been a pleasanter *winter* residence when the river was low, which was the season in which the plagues were inflicted.

Memphis stood on the west side of the river, and opposite to *Old Cairo.* New *Cairo*, or *Grand Cairo*, lies near the Old, to the south, at the foot of the hill on which the castle stands, in a worse situation, being farther from the river, and exposed to more sultry heat. *Cairo* is a corruption of *Kahira*, signifying in Arabic, "the city," by way of eminence.

No, No-Ammon, Diospolis, or Thebes.

This was the capital city of Upper Egypt, and was probably the most ancient of all, built by the first settlers, *Misraim* and his family; whence Egypt, in general, is styled the land of *Misraim*," in the original Scripture, though usually rendered, "the land of *Egypt*."

Its Egyptian name was *No*, (Ezek. xxx. 14.) to which was added *Amon*, or *Amoun*, a title of *Jove* among the Egyptians, according to *Herodotus*. Whence אמון מנא should not be rendered, "the multitude of *No*," (Jer. xlvi. 25.) but "*Amon* [the god] of *No*;" and which, accordingly, is rendered *Diospolis*, "the city of *Jove*," by the Septuagint version of Ezek. xxx. 15. It is reversed, מנא אמון ["the god] of *No*, *Amon*, (Nahum iii. 8.) and then variously rendered by the Septuagint, "the portion of *Ammon*."

It has been mistakenly supposed that this term denoted *Ham*, the youngest son of *Noah*, and the father of *Misraim*. Its real signification is "*Truth*," or "*Veracity*," whence THE LORD is styled אל אמונה, *Æl Amunah*, "God of Truth." Deut. xxxii. 4. According to *Plato*, "the secret and invisible creative power supreme, among the Egyptians, was called *Ammon*;" and *Plutarch* agrees, that it signified "*hidden*." See *Cudworth's* Intellectual System, p. 339. And this also was an epithet of the true God: "Why askest thou my name, seeing it is *secret*?" Judg. xiii. 18. And this perfectly accords with the famous inscription on the temple of *Neith*, or "Wisdom," at *Sais*, in the Lower Egypt, recorded by *Plutarch*. See *Cudworth*, p. 341.

Εγω ειμι Παν το γεγονος και ον και εσομενον·
Και τον εμον πεπλον ουδεις πω θνητος απεκαλυψεν.

"*I am all that hath been, and is, and will be;*
And my veil no mortal yet uncovered."

Hence perhaps the meaning of the ancient aphorism may best be explained, "*Truth* lies *hid* in a well;" as primarily relating to the incomprehensible nature of the Supreme Being, "THE ONLY TRUE GOD," (John xvii. 3.) whom the *Egyptians* styled Σκοτος αγνωστον, "*darkness unknowable*," and the *Athenians*, a *Saite* colony, Αγνωστος Θεος, "THE UNKNOWABLE GOD." Acts xvii. 23. Its other Grecian name, *Thebes*, was probably derived from תבה, *Thebeh*, "an ark," like *Noah's* (Gen. vi. 14.) the memory of which would naturally be preserved by the first settlers after the deluge, in all parts of the earth; and accordingly we find *Thebets* (תבץ) in *Canaan*, called *Thebez*, (Judg. ix. 50.) *Thebes* in *Bœotia*, and *Thibet* in Eastern *Asia*, all from the same root. And *Bruce* observes, that "the figure of the temples in *Thebes* do not seem to be far removed from the idea given us of the ark." Vol. II. p. 31. There he found the ruins

of four prodigious temples, all of them in appearance more ancient, but neither so entire nor so magnificent as those of *Dendera,* covered with hieroglyphics. Vol. I. p. 124.

SYENE.

This was the most southern city of the *Thebais*, bordering on *Nubia.* The prophet *Ezekiel* describes the whole extent of Egypt from north to south, " from *Migdol* to *Syene*, even to the borders of *Cush.*" Ezek. xxix. 10; xxx. 6. Our English Bible incorrectly renders *Migdol,* " tower," instead of the town near the Red Sea, noticed before, and also by Jer. xliv. 1; xlvi. 14. The affix ה, in סונה, is local " to *Syene.*"

CUSH, or ETHIOPIA,

Usually rendered *Ethiopia* in our English Bible, has a very extensive signification. It comprehends all the southern and eastern borders of Egypt. In the foregoing passage of *Ezekiel,* it plainly denotes African *Ethiopia,* or *Nubia* and *Abyssinia;* and in many other passages: Isa. xviii. 1; xx. 3; Ezek. xxx. 5, &c. But in others it must signify Asiatic *Ethiopia,* or *Arabia,* as in the description of the garden of *Eden,* Gen. ii. 13. The wife of *Moses* was contemptuously styled a " *Cushite,*" or *Ethiopian* of *Arabia.* Numb. xii. 1. And where, " *Persia, Ethiopia,* and *Libya,*" are recited in order, the second must denote *Arabia.* Ezek. xxxviii. 5.

Herodotus, in his curious catalogue of the various nations composing the army of *Xerxes,* distinguishes the long-haired Eastern or Asiatic *Ethiopians* from the woolly-headed Western or African; B. vii. Both being descendants of *Cush,* a roving and enterprizing race, who gradually extended their settlements from *Chusistan,* " the land of *Cush,*" or *Susiana,* on the coasts of the *Persian* gulph, through *Arabia,* to the *Red Sea;* and thence crossed over to *Africa,* and occupied its eastern coast, and gradually penetrated into the interior of *Abyssinia.*

THE PYRAMIDS OF EGYPT.

These stupendous monuments of ancient grandeur and ancient tyranny, appear to be of the remotest antiquity. *Herodotus,* who visited Egypt about B.C. 448, and *Diodorus* afterwards, about B.C. 60, found various and contradictory reports in circulation

respecting their age. The *Egyptian* priests, wishing perhaps to conceal the early disgrace and slavery of their nation, ascribed the building of the two great pyramids of *Memphis*, or *Geeza*, to their native kings, *Cheops* and *Cephrenes;* of whom, the former began to reign about B.C. 1082, according to the ensuing rectification of *Egyptian Chronology.* But the people told a different story: "The *Egyptians*," says *Herodotus*, "have so great an aversion to the memory of their founders, that no one will repeat their names; but they attribute their pyramids to one *Philition*, a shepherd, who kept his cattle in these parts." *Diodorus* too observes: "Concerning the builders of these pyramids there is no agreement of opinion, neither among the inhabitants nor historians; for some say, that they were built by the foregoing kings a *thousand* years ago, [B.C. 1060.] others, about *three thousand four hundred* years, [B.C. 3460."]

Truth lies nearly between: for, according to *Manetho*, compared with the *Hindu* records, the first pyramid was built about B.C. 2095, by *Apachnes*, the third king of that *Shepherd* dynasty, who invaded and conquered Egypt from Arabia, in the reign of *Timaus*, or *Thamuz*, who were called *Yksos*, or "*Shepherd kings*," by the Egyptians, and *Pali*, or *Palli*, "*Shepherds*," in the Sanscrit language, by the Hindus; whence probably was derived the *Philition*, of *Herodotus*, signifying not a proper name, but an appellation, "Shepherd." See the *Egyptian Chronology*. The *Arabs* call them *Dsjebel Faroûn*, or "*Pharaoh's* mountains."

The labour of constructing these factitious mountains was immense. "The founder of the great pyramid," says *Herodotus*, from the priests themselves, "shut up all the temples, and interdicted the public sacrifices." He could not therefore be a native prince, of the same religion with the *Egyptians*. "He oppressed the *Egyptians* with hard labour;" probably from the barbarous policy of breaking their spirits, and diminishing their numbers. "He appointed some to receive the stones that were dug out of the quarries in the Arabian mountains, in order to be transported in vessels across the river, when brought down to the Nile; and ordered others to convey them from thence to the mount called *Libycus*, [upon which the pyramids were built.] About a hundred thousand men were employed in this laborious work; ten thousand every three months; [and consequently the whole number in 30 months, or *two years* and *half*.] And

ten years were spent in building a bridge, [or causeway, across the ancient bed of the Nile] which I think to be a work little less considerable than the pyramid; for that bridge [or causeway] is five stadia in length, sixty feet in breadth, and its greatest elevation forty-eight feet; all built of polished stone, and carved with figures of various animals. The pyramids and subterraneous vaults within the hill, on which the pyramids stand, were the labour of *twenty* years." Consequently the whole time, according to this account of *Herodotus*, was *thirty-two* years and *half.*

The first and largest pyramid, according to *Diodorus*, employed three hundred and sixty thousand men for twenty years; and *Pliny* relates the same, and that the three pyramids were built in the space of *seventy-eight* years and *four* months, which is scarcely credible.

"On the first pyramid," says *Herodotus*, "an inscription is seen, declaring in *Egyptian* characters, how much was expended in radishes, onions, and garlick, for the workmen; which the interpreter, as well as I remember, told me amounted to no less than the sum of sixteen hundred talents of silver." Here is the testimony of an eye-witness to the engravings and inscriptions on the causeway, and on the pyramid, though since defaced by time. The characters on the pyramid, to express the vegetables and money, could not, surely, be any other than literal or alphabetical.

The base of the great pyramid, according to *Herodotus*, was 800 Grecian, or about 700 English feet long, and the height equal thereto. This measurement of the base agrees with those of the most skilful and intelligent modern travellers, but not the height, which is under 500. *Herodotus*, therefore, reckoned by the sloping side, representing each side as an equilateral triangle.

This pyramid ends at the top in a platform about twelve or sixteen feet square, which, viewed from the bottom, is diminished nearly to a point. A strong man cannot throw a stone from the top, so as to fall beyond the bottom. And it covers, by calculation, at least an area of eleven English acres!

The great Pyramid seems to have been originally cased with polished marble. After mentioning the enormous stones employed in the work, and the mode of raising them from the lower steps, or ranges, to the higher; *Herodotus* adds, that first, the highest range was *finished off*, (*εκποιειν*) then the rest, in succession; and lastly, the lowest. *Savary*, and others, have

found remains of mortar, and splinters of white marble, on several of the steps. And *Niebuhr*, who denies that they were cased, yet acknowledges, that near the third Pyramid he found a multitude of stones of granite; "which," says he, "might lead us to conjecture, that formerly it had been cased in part with this stone, as the ancient historians have remarked." The *Hindu* records represent them as three mountains of *Gold*, *Silver*, and *Gems;* or as cased with yellow, white, and spotted marbles, respectively. See *Wilford's* Essay on *Egypt and the Nile*, *Asiat. Research*. Vol. III. p. 228.

The entrance of the great Pyramid, leads by some steep and difficult passages to an apartment which is thirty-two feet long, sixteen feet wide, and nineteen feet high. The roof is flat, consisting of nine stones only; whereof seven in the middle are each four feet wide, and sixteen feet long; all laid athwart over the breadth of the chamber, with their ends resting upon the walls on each side.

At the end of this chamber stands an empty tomb all of one stone, three feet and an inch wide, and seven feet two inches long. The stone, says *Le Brun*, is above five inches thick, extraordinarily hard, and like *porphyry:* it is well polished, and so very beautiful, says *Thevenot*, that it is very neat when polished, which makes many break off pieces of it to make seals of. There is no cover to the tomb. The inhabitants of the country say, that the king, who ordered that Pyramid to be built, was never buried there. This tomb, if intended for one, must have been set in the chamber before it was roofed, as the passages thereto are too narrow to admit it through.

In the year 1763, Mr. *Davison*, then consul at *Algiers*, accompanied Mr. *Wortley Montague* into *Egypt*, and spent eighteen months at *Cairo;* during which, he made frequent visits to the pyramids; and was so fortunate as to discover a second chamber in the great pyramid, directly over that which contains the tomb; which had escaped the notice of former travellers, even of *Maillet*, who had been above forty times in the pyramids; and also of later travellers. *Niebuhr* could not find it, though told of it by Mr. *Maynard*, who accompanied Mr. *Davison*. He, therefore, considered its existence as problematical. *Niebuhr*, Voyage en Arabie, Tom. I. p. 161. But it was lately discovered by an enterprising traveller, M. *Caviglia*, the master of a mercantile vessel in the Mediterranean trade, who visited the pyramid

in January, 1817; and found this upper chamber five feet longer than the lower, but of the same breadth; its sides and roof coated with red granite of the finest polish, and the floor uneven, composed of the same blocks of granite which formed the roof of the room below.

The supposed well in this pyramid, which was imagined to communicate with a canal from the Nile, was descended first by *Davison*, and afterwards by *Caviglia*. It consisted of three separate shafts; the first, of 22 feet depth, and at the distance of about 8 feet laterally from its bottom, a second shaft of 34 feet depth; and, beside this, a third shaft of 99 feet, which, added together, made the whole depth 155 feet. But this was dry at the bottom; where it was found, by the latter, to communicate, by a horizontal passage, with the principal entrance or main passage of the pyramid, which he succeeded in clearing of stones and rubbish, (apparently placed there to obstruct it); and after he had opened this continuation of the main passage, sloping downwards in the same inclined angle, to the distance of 200 feet from its commencement, he found a door way which opened upon the bottom of the well. The new passage, however, did not terminate there, but continuing to the distance of 23 feet beyond it, in the same angle of inclination, it became narrower, and took a horizontal direction for about 28 feet farther, where it opened into a spacious chamber, immediately under the central point of the pyramid. This new chamber is 66 feet long, by 27 broad, with a flat roof; and when first discovered, was nearly filled with loose stones and rubbish, which, with considerable labour, M. *Caviglia* removed. The platform of the floor, dug out of the rock, is irregular, nearly one half of the length from the entrance on the eastern end being level, and about 15 feet from the ceiling, while in the middle it descends five feet lower; in which part there is a hollow space, bearing all the appearance of the commencement of a well or shaft. From hence it rises to the western end, so that, at this extremity, there is scarcely room between the floor and the ceiling to stand upright; the whole chamber having the appearance of an unfinished excavation. Some *Roman* characters, rudely formed, had been marked with the flame of a candle on the rock, part of which having mouldered away, rendered the words illegible. No trace of a sarcophagus appeared in this third, and deeply

excavated chamber, which might, perhaps, have been used for the performance of more solemn and secret mysteries.

Mr. *Salt*, the British consul-general at *Cairo*, who had the merit of promoting the discoveries of M. *Caviglia*, and also of M. *Belzoni*, and of communicating them to the public, through the medium of the *Quarterly Review*, attributes the spoliation of the sarcophagus in the first chamber, of its contents, to *Al Mamoun*, the son of Caliph *Haroun al Raschid*, prompted by the treasure-searching spirit of that age, about A.D. 813.

The circumstance of not finding any bones in the sarcophagus of the pyramid of *Cheops*, combined with the supposed communication of the well with the waters of the Nile, led the traveller, *Shaw*, to conclude rather hastily, that the pyramids were never intended for sepulchral monuments, according to the representations of *Herodotus*, *Diodorus*, and *Strabo;* and the ingenious but fanciful *Bryant*, thence imagined that they were designed for water-temples, consecrated to the divinity of the *Nile;* and the sarcophagus, no other than a cistern or water-trough, for holding the sacred elements drawn up from the river. And this hypothesis was adopted in the first edition of this work. But the supposed well has no communication with the river, and does not descend within thirty feet of its level: and the discovery of bones in the sarcophagus of the principal chamber of the second pyramid, supposed to be built by *Cephrenes*, and lately opened, has decided the truth of the ancient tradition.

This second pyramid was opened by the sagacity and persevering industry of an Italian traveller, M. *Belzoni*, at his own cost principally, March 2d, 1818, and a curious account of his process, furnished by Mr. *Salt*, is communicated in the *Quarterly Review*. Exactly under the top of the pyramid, and in the centre of its base, he discovered the great chamber, 46 feet 3 inches long, 16 feet 3 inches wide, and 23 feet 6 inches high, for the most part cut out of the rock, except that part of the roof towards the western end. In the midst, he observed a sarcophagus of granite, partly buried in the ground, to the level of the floor, 8 feet long, 3 feet 6 inches wide, and 2 feet 3 inches deep inside, surrounded by large blocks of granite, being placed apparently to guard it from being taken away, which could not be effected without great labour. The lid of it had been opened: he found in it only a few bones of a skeleton, which he supposed

to be human, and, in all probability, those of *Cephrenes*, the reported builder of this pyramid. On the wall of the western side of this chamber, is an *Arabic* inscription, testifying that 'this pyramid was opened by the Masters *Mahomet El Agar* and *Otman*, and that it was inspected in the presence of the Sultan *Ali Mahomet* I. Ugloch *.' Part of the floor of this chamber had been removed in different places, evidently in search of treasure, by some of those who had found their way into it.

In this pyramid a second chamber has also been discovered, lower than the first, and nearer the entrance, which is 32 feet long, 9 feet 9 inches wide, 8 and 6 feet high.

Shortly after the opening of the pyramid, Major *Fitz-Clarence*, in his journey over-land from *India*, arrived at *Cairo*, and visited the central chamber, and brought away a few fragments of the bones in the sarcophagus; one of which proved to be the lower extremity of the thigh bone, where it comes in contact with the knee joint. This singular relic he presented to the Prince Regent on his return home, and the Prince submitted it to the inspection of that eminent surgeon, Sir *Everard Home*. Sir *Everard*, not entertaining a doubt of its belonging to a human skeleton, took it to the Musæum of the College of Surgeons, that by adjusting it with the same part of different sized skeletons, he might be enabled to form some estimate of the comparative size of the ancient *Egyptians* and modern *Europeans*. On a closer and more laborious inspection, however, the fragment was found to agree with none of them: and it finally appeared, that instead of forming any part of the thigh-bone of a human body, it actually made part of that of a *cow*.

And to corroborate this evidence, M. *Belzoni* discovered a grand catacomb at *Thebes*, in *Upper Egypt*, called *Biban el Moluk*, "the *tombs*," or, rather, "*gates of the kings*," which extended 309 feet from the entrance in front to the innermost chamber, the whole cut out of the living rock; the sides of which were as white as snow, covered with paintings of well shaped figures in *al fresco*, as fresh as if they had been just laid on, and with hieroglyphics quite perfect. In one of its numerous chambers, he found a sarcophagus of alabaster, exquisitely beautiful, 9 feet 5 inches long, by 3 feet 9 inches wide, and 2 feet 1 inch deep, carved within and without with hieroglyphics and figures

* A *Tartaric* title, as *Ulcg Bey*.

in intaglio, nearly in a perfect state; sounding like a bell, and as transparent as glass. From the extraordinary magnificence of this tomb, M. *Belzoni* conceives that it must be the depository of the remains of *Apis:* in which idea he is the more confirmed by having found the carcass of a *bull*, embalmed with *asphaltum*, in the innermost chamber.

This decides the point, that the pyramids of *Egypt*, and the subterraneous caverns of *Thebes*, were alike designed as sepulchral monuments of their *bestial gods*, and probably of their kings and priests also. The celebrated *Labyrinth*, near the lake *Mœris*, which *Herodotus* admired still more than the pyramids, in its fifteen hundred subterraneous chambers, which he was not permitted to enter, according to the information of the priests, contained the bodies of the kings who built the Labyrinth, and also of the *Holy Crocodiles*. B. II. §. 148.

The second pyramid of *Cephrenes*, is the only one which retains a part of its outside casing, from the top, about a third part of its distance downwards; what remains entire, is of a white calcareous stone, which has been usually called marble, but is, in fact, a fine close-grained lime-stone, susceptible of a high polish.

The remains of the covering of the third pyramid of *Mycerinus*, are still scattered about its base, and particularly near the angle; they are of red granite.

Behind this stands a fourth pyramid, a hundred feet lower than the third. These four great pyramids are surrounded by an immense number of smaller pyramids and tumuli, like the graves in a church-yard round the church, extending on the north and on the south, along the western bank of the Nile, as far as the eye can reach.

Several of these edifices were cleared of the sand and rubbish with which they were choaked, by M. *Caviglia*, and found to consist of different numbers of apartments, variously disposed, but similarly decorated with bas-reliefs and paintings, according, perhaps, to the wealth or caprice of those who erected them. One in particular, from the delicacy of its colours, its general pleasing effect, and superior style of execution, was deemed deserving of the closest attention. In all the mausoleums which they opened, were found fragments of bitumen, great quantities of mummy cloth, and of human bones, which seemed to remove all doubt of their having served the purpose of entombing the dead.

It deserves to be noticed, that in some one apartment or another of all these monumental edifices, was a deep shaft or well, from the bottom of which a narrow passage conducted to a subterranean chamber. One of these shafts cleared out by M. *Caviglia*, was 60 feet deep, and in the chamber a little to the south of the lower extremity, was standing, without a lid, a plain but highly finished sarcophagus, of the same dimensions nearly as that in the pyramid of *Cheops*, but of a superior polish. This discovery supplies a strong argument in favour of the pyramids being tombs for the *kings* who constructed them, and also for their animal gods, the *Apis*, &c.

Many of these sepulchral edifices seem to have been constructed of the dilapidated casing of the great pyramids; for their walls consist of the same sort of stone, and many of the fragments are covered with hieroglyphics, particularly the parts round the door-ways. One of these stones, bearing an inscription of hieroglyphics and figures, was observed to be built into the walls upside down: a curious circumstance, which proves beyond a doubt, that it had constituted part of some other edifice previously to being placed in its present position.

There are no traces of *hieroglyphics* at present discoverable upon any of the pyramids. But that they formerly abounded with such, may be inferred from the reports of the ancient Historians, *Herodotus*, *Diodorus*, *Pliny*, &c. At a later period, *Abdollatiph*, an Arabian physician, who visited Egypt in A.D. 1190, found abundance. " On the stones of the two greater pyramids," says he, " are ancient hieroglyphic inscriptions, but unknown: nor is there any person in the cities of Egypt, who can assert that they are now to be understood. The inscriptions are very numerous; so that if such as are found on these two pyramids alone were to be copied, they would fill *ten thousand* volumes."

These new and curious discoveries, satisfactorily account for the extraordinary dilapidation and spoliation of the original coating of the great pyramids, since the time of *Herodotus*, and still later, of *Abdollatiph*. The casing was torn down, and applied to the construction of the small pyramids, or oblong sepulchral edifices of later ages.

It is probable, however, that the *tumuli*, or little mounds, which also abound in this vast cemetery, are nothing more than

similar buildings of higher antiquity, mouldered away to their present shape; or that they were constructed, originally, of more perishable materials, like the brick pyramid of DASHOUR, which has every appearance of soon changing its form into that of the rude tumulus. *Herodotus*, our surest guide, when he speaks from his own information, reports the following remarkable inscription thereon: " Do not compare *me* with the pyramids of *stone;* for I excel them as much as Jupiter excels the other gods: for those who built me thrust poles into a lake, and collecting the mud which adhered to them, they made bricks of it, and thus they constructed me."

This pyramid is generally allowed to have been built by *Asychis*, or *Bocchoris*, whose reign began, B.C. 815, according to the ensuing rectification of Egyptian Chronology.

The recent discoveries of *Davison*, *Belzoni*, and *Caviglia*, are circumstantially detailed in the *Quarterly Review*, September, 1818, in the Article of *Light's Travels* and *Addendum;* and January, 1819, under the Article of *Antiquities of Egypt*.

That the Pyramids were originally cased with marble, or granite, is proved by the testimony of *Abdollatiph:* who has also demonstrated the stupendous labour and skill employed in the construction of these factitious mountains; by a mad and fruitless project for pulling them down, attempted by *Malec al Azir Othman*, son and successor of the famous Sultan, *Saladin Joseph ebn Job*, the real builder of *Joseph's* famous well at *Cairo*, vulgarly attributed to the patriarch and prime minister of Egypt.

This young prince, at the persuasion of some foolish favourites, wished to immortalize himself by pulling down the Pyramids. And accordingly began with the smallest, built of *red* granite. Having collected a great number of engineers, masons, and labourers, he ordered them to demolish that Pyramid, and commissioned the grandees of the kingdom to superintend the execution of it. They immediately pitched their tents upon the spot, collected artists and workmen from all parts, and maintained them at an enormous expence. Here they continued for *eight* months, with horses and men: pulling down, in the course of an entire day, with the utmost labour and difficulty, one or two stones at the utmost. The labourers above forced out every stone with wedges, levers, and iron crows; while those below

pulled it down with cables and ropes. When it fell, so violent was its fall, that the sound was heard at a surprising distance, the mountain trembled and the earth shook; and the stone buried itself in the sand; whence they extracted it at length, with additional labour and fatigue. Then they broke it in pieces with wedges, and conveyed the fragments in carriages to the further end of the mountain, at no great distance. Having thus spent much time to little purpose, their resources failed, their difficulties increased, and at last they were obliged to desist, filled with dejection, confusion, and despair. All they effected was to deface the Pyramid, and betray the weakness and impotence of the attempt. Should any one view the stones that are taken down, he would imagine that the whole Pyramid had been destroyed, so great is the mass; but if he should then view the Pyramid itself, he would scarcely believe that it had been at all injured; for only a small part of one of its sides is demolished. Perceiving the prodigious toil it cost them to pull down every single stone, I asked the superintendant of the masons, says *Abdollatiph*, *Whether, if they were offered a thousand pieces of gold to replace any stone in its proper and original position, they would be able to do it?* He answered, swearing by the living God, that *though they should be offered double that sum, the thing would be impossible.*" This happened in the year of the *Hegira* 593, [A.D. 1197.] See *Abdollatiph's* History of Egypt, translated by Professor *White*, of *Oxford*, in Latin; or the *Monthly Review*, April, 1802, p. 344.

THE PASSAGE OF THE RED SEA BY THE ISRAELITES.

The precise place of this passage, when the Israelites were thrust out of Egypt in haste by the *Egyptians*, after the last tremendous plague of the destruction of the first-born, has been much contested by Geographers and Travellers. Some place it near *Suez*, at the head of the Gulph: others, with more probability, about ten hours journey lower down, at *Clysma*, or the valley of *Bedea*. See *Niebuhr's* and *Bryant's* Maps of the *Red Sea*.

The day before the passage, by the Divine command, " the Israelites encamped beside *Pi-ha-hiroth*, between *Migdol* and

the Sea, over against *Baal-zephon*." Exod. xiv. 2; Numb. xxxiii. 7.

Pi-ha-hiroth signifies "the mouth of the ridge," or chain of mountains, which line the western coast of the Red Sea, called *Attaka* ("Deliverance;") in which was a gap, which formed the extremity of the valley of *Bedea*, ending at the sea eastward, and running westwards to some distance, towards *Cairo; Migdol*, signifying "a tower," probably lay in that direction; and *Baal-zephon*, signifying "the Northern *Baal*," was probably a temple on an opposite promontory, built on the eastern coast of the Red Sea.

And the modern names of places in the vicinity tend to confirm these expositions of the ancient.

Besides *Attaka*, on the eastern coast opposite, is a head-land, called *Ras Musa*, or "the Cape of *Moses*;" somewhat lower, *Hamam Faraun*, "*Pharaoh's* springs;" below *Girondel*, a reach of the Gulph, called *Birket Faraun;* and the general name of the Gulph is *Bahr al Kolsum*, "the Bay of Submersion." These names indicate that the passage was considerably below *Suez*, according to the tradition of the natives.

The depth and breadth of the Gulph, from *Suez* downwards, is thus described:—"I have not found," says *Niebuhr*, "in this sea, from *Suez* southwards, any bank or isthmus under water. When we departed from *Suez*, we sailed as far as *Girondel*, without fear of encountering any such. We had in the first place, (the road of *Suez*) four fathom and half; at three German leagues from *Suez*, and in the middle of the Gulph, four fathoms; and about *Girondel*, near the shore, even to ten fathoms." *Description de l'Arabie*, p. 355. *Bruce* also, describing the place of passage, opposite *Ras Musa*, or a little below it, says, "there is here about fourteen fathom of water in the channel, and about nine in the sides, and good anchorage every where. The farthest side (the Eastern) is a low sandy coast, and a very easy landing place." *Travels*, &c. Vol. I. p. 244. *Shaw* reckons the breadth of the Gulph, at this place, about 10 miles; *Niebuhr*, three leagues and more; *Bruce*, something less than four leagues: we may therefore estimate it about 12 miles, from their joint reports. But this space the host of the Israelites could easily have passed in the course of a night; from the evening to the ensuing "*morning watch*," or dawn of day, according to the *Mosaical* account. And surely the depth of the sea was no impediment,

when the LORD "divided it by a *strong east wind*, which blew across the sea *all that night*, and made [the bottom of] the sea dry land; and the children of *Israel* went into the midst of the sea upon the dry ground: and the waters were a *wall* unto them, on their right hand and on their left." Exod. xiv. 21—27.

In the queries of *Michaelis*, sent to *Niebuhr*, when in Egypt, it was proposed to him to enquire upon the spot, "Whether there were not some *ridges of rocks* where the water was shallow, so that an army at particular times may pass over? Secondly, Whether the *Etesian* winds, which blow strongly all Summer from the north-west, could not blow so violently against the Sea as to keep it back on a heap; so that the Israelites might have passed without a miracle." And a copy of these queries was left also for *Bruce*, to join his enquiries likewise. His observations on which, are excellent.

"I must confess, however learned the gentlemen were who proposed these doubts, I did not think they merited any attention to solve them. This passage is told us by Scripture to be a *miraculous* one; and if so, we have nothing to do with *natural* causes. If we do not believe *Moses*, we need not believe the transaction at all, seeing that it is from his authority alone we derive it. If we believe in God, that He *made* the sea, we must believe he could *divide* it when He sees proper reason; and of that He must be the only judge. It is no greater miracle to divide the *Red Sea*, than to divide the river *Jordan*.

"If the *Etesian* wind, blowing from the north-west in Summer, could keep up the sea as a wall on the right, or to the south, of fifty feet high; still the difficulty would remain of building the wall on the left hand, or to the north. Besides, water standing in that position for a day must have lost the nature of fluid. Whence came that cohesion of particles which hindered that wall to escape at the sides? This is as great a miracle as that of *Moses*. If the *Etesian* winds had done this once, they must have repeated it many a time before and since, from the same causes. Yet *Diodorus Siculus*, Lib. III. p. 122, says, The *Troglodytes*, the indigenous inhabitants of that very spot, had a tradition from father to son, from their very earliest ages, that *once this division of the sea did happen there; and that, after leaving its bottom some time dry, the sea again came*

back, and covered it with great fury *. The words of this author are of the most remarkable kind: we cannot think this Heathen is writing in favour of Revelation: he knew not *Moses*, nor says a word about *Pharaoh* and his host; but records the miracle of the division of the sea in words nearly as strong as those of *Moses*, from the mouths of unbiassed, undesigning pagans.

"Were all these difficulties surmounted, what could we do with the *pillar of fire?* The answer is, We should not believe it. Why then believe the passage at all? We have no authority for the one, but what is for the other: it is altogether contrary to the ordinary nature of things; and if not a *miracle*, it must be a *fable*." P. 244—246.

Still, such sceptical queries have their use; they lead to a stricter investigation of facts, and thereby tend strongly to confirm the veracity of the history they meant to impeach. Thus it appears, from the accurate observations of *Niebuhr* and *Bruce*, that there is no *ledge of rocks* running across the Gulph any where, to afford a shallow passage. And the second query, about the *Etesian*, or northerly wind, is refuted by the express mention of a strong *easterly* wind blowing across, and scooping out a dry passage; not that it was necessary for OMNIPOTENCE to employ it there as an instrument, any more than at *Jordan:* but it seems to be introduced in the Sacred History by way of anticipation, to exclude the natural agency that might in after times be employed for solving the miracle; and it is remarkable that the *monsoon* in the Red Sea blows the summer half of the year from the north; the winter half, from the south: neither of which could produce the miracle in question.

Wishing to diminish, though not to deny, the miracle, *Niebuhr* adopts the opinion of those who contend for a higher passage near *Suez*. "For," says he, "*the miracle would be less* if they crossed the sea there, than near *Bedea*. But whosoever should suppose that the multitude of the Israelites could be able to cross it here without a *prodigy* would deceive himself: for even in our days, no caravan passes that way to go from *Cairo* to Mount *Sinai*, although it would shorten the journey consider-

* *Diodorus* attributes this to an "*extraordinary high tide*." The fact, however, that "*the ground was bare to the very bottom of the Gulph*," is admitted by this curious tradition.

ably. The passage would have been *naturally* more difficult for the Israelites some thousands of years back, when the Gulph was probably larger, deeper, and more extended towards the north: for in all appearance the water has retired, and the ground near this end has been raised by the sands of the neighbouring desert." P. 354.

But it sufficiently appears, even from *Niebuhr's* own statement, that the passage of the Israelites could not have taken place near *Suez:* for 1. He evidently confounded the town of *Kolsum*, the ruins of which he places near *Suez*, and where he supposed the passage to be made, with the bay of *Kolsum*, which began about 45 miles lower down; as *Bryant* has satisfactorily proved, from the astronomical observations of *Ptolomy* and *Ulug Beigh*, made at *Heroum*, the ancient head of the Gulph. See his *Plagues of Egypt*, p. 371, 372.

2. Instead of crossing the Sea at or near *Ethan*, their second station, the *Israelites* "*turned*" southwards, along the western shore; and their third station at *Pihahiroth*, or *Bedea*, was at least a full day's journey below *Ethan;* as *Bryant* has satisfactorily proved from Scripture. Exod. xiv. 2. And it was this unexpected change in the direction of their march, and the apparently disadvantageous situation in which they were then placed, "entangled in the land, and shut in by the wilderness," with a deep sea in front, the mountains of *Attaka* on the sides, and the enemy in their rear, that tempted the *Egyptians* to pursue them through the valley of *Bedea*, by the direct route from *Cairo;* who "overtook them encamping by the sea, beside *Pihahiroth*, opposite to *Baalzephon*." Exod. xiv. 2—9.

Niebuhr wonders how the *Israelites* could suffer themselves to be brought into such a disadvantageous situation, or be led blindfold by *Moses* to their apparent destruction. "One need only travel with a caravan," says he, "which meets with the least obstacle, viz. a small torrent, to be convinced that the Orientals do not let themselves be led, like fools, by their *Caravan Baschi*," or leader of the caravan. P. 350.

But the *Israelites* went out of Egypt with "*a high hand*," though led by *Moses*, yet under the visible guidance and protection of "THE LORD GOD *of the Hebrews*," "who went before them by day in a *pillar of a cloud*, and by night in a *pillar of fire*." And who, for their encouragement, to enter the passage of the Sea miraculously prepared for them, removed the *cloud*

which went before the camp of Israel hitherto, and placed it behind them. "And it came between the camp of the *Egyptians* and the camp of *Israel:* and it was a cloud and darkness to the one, but gave light by night to the other: so that the one came not near the other *all the night.*" Exod. xiv. 8—20.

Niebuhr wonders also, how *Pharaoh* and the Egyptians could be led to follow the *Israelites.*

"*Pharaoh* must have wanted *prudence*, if, after having seen so many prodigies in *Egypt*, he had entered into a sea of more than three leagues wide: all the Egyptians too must have been *bereft of understanding*, in wishing to pursue the *Israelites* into such a sea. Doubtless they knew their own country well enough to distinguish the bottom of a large sea, which bounds Egypt on that side, from a desart." P. 352.

But *Pharaoh* and the *Egyptians* probably did not know their situation. The cloud which separated them from the *Israelites*, encreased the darkness of the night: and they probably did not enter into the sea till about *midnight*, by which time the van of the Israelites might have reached the Eastern shore. Meanwhile the bed of the sea, now beaten by the feet of the immense multitude of men and cattle that had gone before, might not have been easily distinguishable from the desart. If we ask, why did the *Egyptians* venture to pursue the Israelites by night? why did they not wait till day-light, when they could see whither they were going? *Niebuhr* himself has unwittingly answered the question: *Pharaoh* wanted "*prudence*," indeed, and the *Egyptians* were "*bereft of understanding.*"—And this is the Scriptural solution: "For God *hardened* the heart of *Pharaoh* to follow after them, that He might be honoured upon *Pharaoh* and all his host; and that, by their miraculous destruction, the *Egyptians* might know that He was THE LORD" [SUPREME.] Exod. xiv. 4—18.

The *Egyptians* did not find out their mistake till the *morning appeared*, or till day-break; when the rear of the Israelites had gained the shore, and the *Egyptians* had reached the middle of the sea, and their whole host had entered into it: then indeed they attempted to fly back; but in vain; for "their chariot wheels were broken off, so that they drave them heavily, and their host was troubled" by THE LORD, who *looked*, or frowned, upon them through the cloudy pillar of fire, and overwhelmed all their host in the midst of the sea; when the sea

suddenly returned to his strength at the signal of *Moses* stretching forth his hand over it. Exod. xiv. 24—28.

The particulars of this transaction demonstrate, that neither the host of the *Israelites*, nor the host of *Pharaoh*, could possibly have passed at the head of the Gulph near *Suez;* where the sea was only "*half a league*" broad, according to *Niebuhr's* own supposition, and consequently too narrow to contain the whole host of *Pharaoh* at once; whose 600 chariots alone, exclusive of his cavalry and infantry, must have occupied more ground.

Manetho, and the *Egyptian* writers, have passed over in silence this tremendous visitation of their nation. An ancient writer, however, *Artapanus*, who wrote a history of the Jews, about B.C. 130, has preserved the following curious *Egyptian* traditions:

"The *Memphites* relate, that *Moses*, being well acquainted with the country, watched the influx of the tide, and made the multitude pass through the dry [bed of the] sea. But the *Heliopolitans* relate, that the king, with a great army, accompanied by the *sacred animals*, pursued after the *Jews*, who had carried off with them the substance of the *Egyptians*. And that *Moses*, having been directed by a Divine voice to strike the sea with his rod, when he heard it, touched the water with his rod; and so the fluid divided, and the host passed over through a dry way. But when the Egyptians entered along with them, and pursued them, it is said, that *fire flashed against them in front*, and the sea, returning back, overwhelmed the passage. Thus the *Egyptians* perished, both by the fire, and by the reflux of the tide." *Euseb. Præp. Evang.* Lib. 9, cap. 27, p. 436.

The latter account is extremely curious: it not only confirms SCRIPTURE, but it notices three additional circumstances: 1. That for their protection against THE GOD OF ISRAEL, the *Egyptians* brought with them the *sacred animals;* and by this means "GOD executed judgment upon all the [bestial] gods of *Egypt*," as foretold, Exod. xii. 12, who perished with their infatuated votaries; completing the destruction of both, which began with "smiting the *first-born* both of man and beast." 2. That the recovery of "the *jewels* of silver and jewels of gold, and raiment," which they *asked* and obtained of the Egyptians," according to the Divine command, Exod. xii. 35, 36, was a

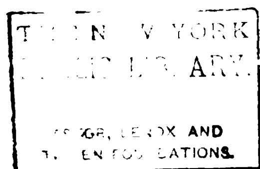
leading motive with the *Egyptians* to pursue them; as the bringing back the *Israelites* to slavery had been with "*Pharaoh* and his servants," or officers. And 3. That the destruction of the *Egyptians* was partly occasioned by *lightning* and *thunderbolts*, from the presence of the Lord: exactly corresponding to the Psalmist's sublime description:

"The waters saw thee, O God, the waters saw thee: they were afraid; the depths also were troubled. The clouds poured out water, the air thundered, thine arrows also went abroad:—Yea he sent out his arrows, and scattered them; he shot forth *lightnings, hail-stones, and coals of fire*—and discomfited them. Then the channels of waters were seen, and the foundations of the world were discovered, at thy rebuke, O Lord, at the blast of the breath of thy nostrils." Psalm lxxvii. 16, 17; xviii. 13—15.

The *Red Sea* derived its name from *Edom*, signifying "red," a title of *Esau*, to whom the bordering country of *Edom*, or *Idumæa*, belonged. Gen. xxv. 30; xxxvi. 31—40. It was also called *Yam Suph*, "the weedy sea," in several passages, Numb. xxxiii. 10; Psalm cvi. 9, &c. which are improperly rendered "the Red Sea." Some learned authors have supposed that it was so named from the quantity of weeds in it. "But in contradiction to this," says *Bruce*, "I must confess, that I never in my life, (and I have seen the whole extent of it) saw a weed of any sort in it. And indeed, upon the slightest consideration, it will appear to any one, that a narrow Gulph, under the immediate influence of monsoons, blowing from contrary points six months each year, would have too much agitation to produce such vegetables, seldom found but in stagnant water, and seldomer, if ever, found in salt ones. My opinion then is, that it is from the large trees, or plants, of *white coral*, perfectly in imitation of plants on land, that the sea has taken its name. I saw one of these, which, from a root nearly central, threw out ramifications in a nearly central form, measuring twenty-six feet diameter every way." P. 247.

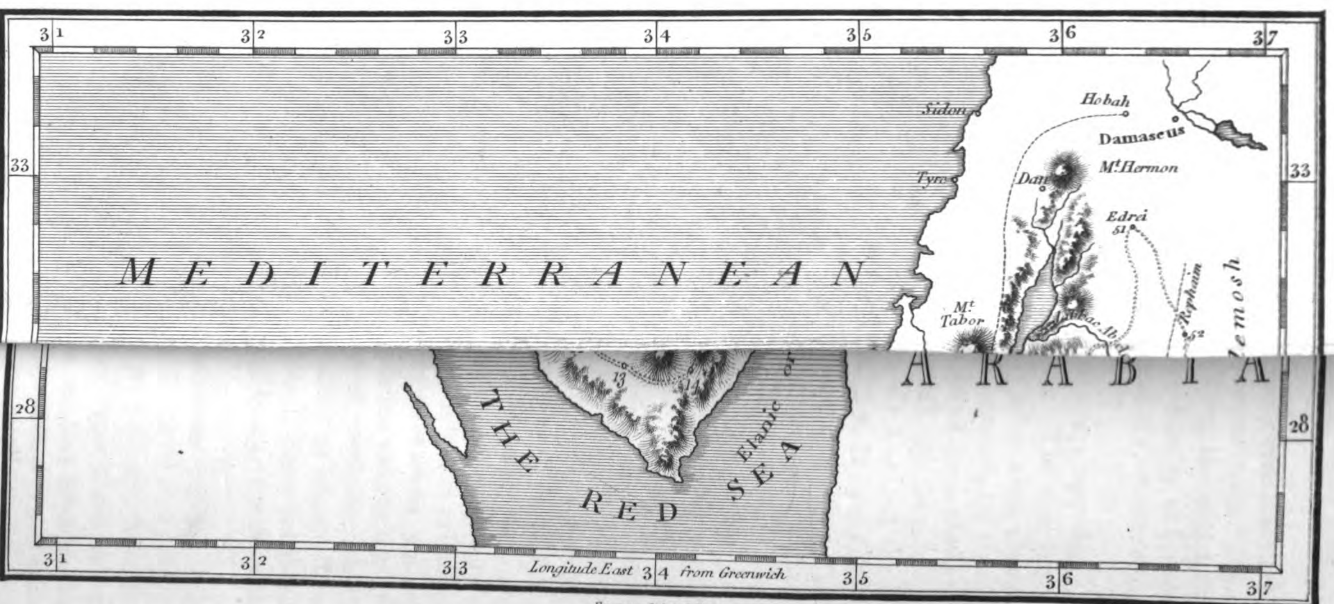
This seems to be the most probable solution that has been hitherto proposed of the name.

The *tides* in this sea are but moderate. At *Suez* the difference between high and low water did not exceed from three to four feet; according to *Niebuhr's* observations on the tides in that Gulph, during the years 1762 and 1763. *Voyage en Arabie*, p. 363.



STATIONS OF THE ISRAELITES IN THE DESERTS OF ARABIA PETRÆA.

From BISHOP CLAYTON'S Map.



Engraved by J. Bye

Published by C. J. G. & F. Rivington.

STATIONS OF THE ISRAELITES IN THE WILDERNESS.

The journey of the *Israelites*, for forty years, from their departure out of Egypt, till their arrival in the promised land of *Canaan*, is the most extraordinary ever recorded in history. Every stage of it almost is marked by a succession of miracles the most signal and astonishing. And for the instruction and admonition of posterity, *Moses* was directed to form a journal of their several stations and encampments; the principal of which are set down, Numb. xxxiii. 1—49; and the rest are here supplied from the tenor of the history, in the last four books of *Moses;* together with the leading occurrences, arranged in chronological order.

In tracing their intricate route through "the great and terrible, the waste and howling wilderness" of *Arabia Petræa;* I have principally followed the ingenious delineation of Bishop *Clayton*, in his *Chronology of the Bible*, 1747; and adopted the numeral references of his map; the general plan of which is taken from *Shaw*, *Pococke*, *Reland*, &c. It is more correct in its outline than any I have seen; though it is not professed by the author to be critically accurate as to the situation of every place. The line of larger dots represents the route of the *Assyrian* Confederates, until they were defeated by *Abraham.* Gen. xiv.

TABLE OF STATIONS, &c.

Y. M. D.	Station	Exodus			Numbers		
(1648.) 1. 1. 15.	1 *Rameses*, near *Cairo* ...	Exo.	xii.	37.	Nu.	xxxiii.	3.
	2 *Succoth*	—	xii.	37.	—	xxxiii.	3.
	3 *Etham*, or *Adsjerud*	—	xiii.	20.	—	xxxiii.	5.
	4 *Pihahiroth*, or Valley of *Bedea*	—	xiv.	1.	—	xxxiii.	7.
	5 *Shur;—Ain Musa* ..... 6 Desart of *Shur*, or *Etham*	—	xv.	22.	—	xxxiii.	8.
	7 *Marah*,—"bitter" waters healed	—	xv.	23.	—	xxxiii.	8.
	8 *Elim*,—Valley of *Corondel*	—	xv.	27.	—	xxxiii.	9.
	9 Encampment by the *Red Sea*				—	xxxiii.	10.
1. 2. 15.	10 Desart of *Sin*, Valley of *Baharim*	—	xvi.	1.	—	xxxiii.	11.
	Manna, for 40 years ...	—	xvi.	13.			

Y. M. D.		Event				
		Quails, for a day......	Exo.	xvi.	35.	
		Sabbath renewed, or revived............	—	xvi.	23.	
	11	*Dopkah*..............				Nu. xxxiii. 12.
	12	*Aluth*................				— xxxiii. 13.
	13	*Rephidim*............	—	xvii.	1.	— xxxiii. 14.
		Water, from the rock *Massah*..........	—	xvii.	6.	
		Amalekites defeated ..	—	xvii.	13.	
		Jethro's visit........	—	xviii.	5.	
		Judges appointed	—	xviii.	25.	
1. 3. 15.	14	Mount *Sinai*, or *Horeb* .	—	xix.	1.	— xxxiii. 15.
		The *Decalogue* given ...	—	xx.	1.	
	14	The *Covenant* made	—	xxiv.	7.	
		The *Golden Calf*	— Neh.	xxxii. ix.	6. 18.	
1. 6.		The *Covenant* renewed..	Exo.	xxxiv.	27.	
		The first *Muster*, or *Numbering*..............	—	xxxviii.	26.	
(1647) 2. 1. 1.		The *Tabernacle* erected	—	xl.	17.	
		Aaron consecrated, and his Sons	Lev.	viii.	6.	
2. 1. 8.		Sacrifices of *Atonement* .	—	ix.	1.	
2. 1. 14.		The second *Passover* ...	Nu.	ix.	5.	
2. 2. 1.		The second *Muster*	—	i.	3.	
		Nadab and *Abihu* destroyed	— Lev.	iii. x.	4. 1.	
2. 2. 20.	15	Desart of *Paran*	Nu.	x.	12.	
	16	*Taberah*..............	—	x.	33.	
		Murmuring of the People	—	xi.	3.	
	17	*Kibroth Hataavah*, or *Tophel*...............	— Deu.	xi. i.	34. 1.	— xxxiii. 16.
		Quails, for a month.... Plague of the People .. Council of LXX. appointed				
	18	*Hazeroth*	Nu. De.	xi. i.	35. 1.	— xxxiii. 17.
		Miriam's Leprosy	Nu.	xii.	10.	
2. 5.	19	*Kadesh Barnea*, in *Rithmah*, or "the Desart" of *Sin*, or *Paran*	— —	xii. xxxii.	16. 8.	— xxxiii. 18.
		Twelve Spies sent	—	xiii.	2.	
2. 7. 6.		Their Return	—	xiii.	26.	
		The People rebel	—	xiv.	2.	
		Sentenced to wander 40 Years..............	— —	xiv. xxxii.	33. 13.	

Y.	M.	D.					
			Ten of the Spies destroyed	Nu. xiv.	37.		
			The People defeated by the *Amalekites*	— xiv.	45.		
			Rebellion of *Corah*, &c.	— xvi.	1.		
			Budding of *Aaron's* Rod	— xvii.	10.		
			20 *Rimmon Parez*			Nu. xxxiii.	19.
			21 *Libnah*, or *Leban*	Deu. i.	1.	— xxxiii.	20.
			22 *Rissah*			— xxxiii.	21.
			23 *Kehelathah*			— xxxiii.	22.
			24 Mount *Shaphar*			— xxxiii.	23.
			25 *Haradath*, or			— xxxiii.	24.
			Hazar Addar, or *Adar* ..	Nu. xxxiv. Josh. xv.	4. 3.		
			26 *Makeloth*			— xxxiii.	25.
			27 *Tahath*			— xxxiii.	26.
			28 *Tarah*			— xxxiii.	27.
			29 *Mitcah*			— xxxiii.	28.
			30 *Hashmonah*, or			— xxxiii.	29.
			Azmon, or *Selmonah*	Nu. xxxiv. Jos. xv.	4. 4.		
			31 *Beeroth*	Deu. x.	6.		
			32 *Moseroth*, or *Mosera* ...			— xxxiii.	30.
			33 *Benejaakan*, or *Banea* ..			— xxxiii.	31.
			34 *Horhagidgad*, or			— xxxiii.	32.
			Gudgodah	— x.	7.		
			35 *Jotbathah*, or			— xxxiii.	33.
			Etebatha, or *Elath*	— ii. 1 K. ix.	8. 26.		
			36 *Ebrona*			— xxxiii.	34.
			37 *Ezion Geber*, or			— xxxiii.	35.
			Dizahab	Deu. i.	1.		
(1609) 40.	1.		38 *Kadesh Barnea* again, after 38 years	— ii.	14.	xxxiii.	36.
			Miriam's Death	Nu. xx.	1.		
			Water from the rock *Meribah Kadesh*, (Deut. xxxii. 51.)	— xx.	13.		
			Moses and *Aaron* offend	— xx. — xxvii.	12. 14.		
			39 Mount *Hor*, or *Seir*, on the edge of *Edom*	— xx.	22.	— xxxiii.	37.
40.	5.		*Aaron's* Death	— xx.	23.	— xxxiii.	38.
			King *Arad* attacks the *Israelites*	— xxi.	1.		
40.			*Kibroth Hataavah*, or *Tophel*, again	Deu. i.	1.		
			41 *Zalmonah*, or *Hashmonah*, again			— xxxiii.	41.

Y.	M.	D.				
			The People bitten by fiery Serpents			
			The *Brazen Serpent* erected	Nu. xxi.	8.	
			42 *Punon*			Nu. xxxiii. 42.
			43 *Oboth*	— xxi.	10.	— xxxiii. 43.
			44 *Jim*, or *Jie Abarim*, in the border of *Moab*			— xxxiii. 44.
			45 The valley and brook *Zered*	— xxi. Deu. ii.	12. 13.	
			46 *Arnon*	Nu. xxi.	12.	
			47 *Beer*, or *Beer Elim*	— xxi. Isa. xv.	16 8.	
			48 *Jahaz*	Nu. xxi.	23.	
			49 *Heshbon*	— xxi.	24.	
			Sihon defeated			
			50 *Jaazer*	— xxi.	32.	
			51 *Edrei*	— xxi.	33.	
			Og defeated			
			52 *Dibon Gad*			— xxxiii. 45.
			53 *Almon Diblathaim*	Ezk. vi.	14.	— xxxiii. 46.
			54 *Mattanah*	Nu. xxi.	18.	
			55 *Nahaliel*	— xxi.	19.	
			56 *Bamoth*	— xxi.	19.	
			57 *Pisgah*	— xxi.	20.	
			58 *Abarim*			— xxxiii. 47.
			59 *Shittim*, or *Abel Shittim*, in the plains of *Moab*	— xxv. Jos. iii.	1. 1.	— xxxiii. 48.
			Idolatry of *Baal Peor*	Nu. xxv.	3.	
			Midianites punished	— xxv.	17.	
			The third *Muster*	— xxvi.	2.	
40.	11.	1.	Last Exhortations of *Moses*	Deu. i.	2.	
40.	12.	1.	*Joshua* appointed his Successor	Nu. xxvii. Deu. xxxiv.	18. 9.	
			Death of *Moses*	— xxxiv.	5.	
			A Month's Mourning	— xxxiv.	8.	
41.	1.	1.	*Joshua* sends two Spies	Jos. ii.	1.	
41.	1.	10.	60 Passage of the river *Jordan*	— iv.	29.	

The chief difficulty in constructing this most ancient, curious, and valuable *Itinerary*, arose 1. From the difference of the names given to the same place; and 2. From the sameness of the names of widely different places.

I. The great sandy desart of *Shur*, which divides *Egypt* from *Palestine*, stretching from the *Mediterranean* to the head of the

Red Sea, at both sides of the latter assumes the name of *Etham*. Thus the third station of the Israelites is called " *Etham*, on the edge of the wilderness," Exod. xiii. 20. And after passing the Red Sea, they entered " the wilderness of *Shur*," Exod. xv. 22. But near their landing-place on the eastern coast, *Niebuhr* marks a mountain to the north-east, called *Etti*, evidently from *Etham*. See his Map, Tab. XXIII. *Description de l'Arabie*, p. 352.

This mountain forms the southern termination of the great ridge of mountains, now called *Jebel Te*, which runs in a north-easterly direction, stretching along the eastern coast of the Dead Sea, or *Asphaltic* Lake, towards the head of the *Elanitic*, or eastern gulph of the Red Sea; forming the western boundary of *Arabia Petræa*, and called in Scripture indiscriminately Mount *Hor*, and Mount *Seir*, because it was conquered from the original inhabitants, the *Horites*, Gen. xiv. 6; by *Esau* and his family, Gen. xxxvi. 20, 21; whose eldest son was *Seir*, Deut. ii. 22.

The southern district of *Arabia Petræa* was called in general, " the wilderness of *Zin*," which name is still given by the inhabitants of *Tor* to the desart in their neighbourhood. The northern and western districts were also called *Paran* and *Kadesh*. Thus the disastrous station of *Kadesh*, named *Barnea*, " son of wandering," (No. 19.) to which the Israelites returned again, (No. 38.) after thirty-eight years, is said to be in the wilderness of *Zin*, Numb. xiii. 21; and again, on their return, Numb. xx. 1; Deut. xxxii. 51; but in the wilderness of *Paran*, Numb. xii. 16. While in the Itinerary, it is simply called *Rithmah*, signifying " the wilderness," from *Rethem*, which, according to *Castellus*, signifies *locus desolatorius*, *desertum;* and properly denotes a plant which flourishes in sandy desarts, called " *Juniper*," Job xxx. 3, 4; 1 Kings xix. 4, 5; whence it is transferred to signify a desart, like our English word *Heath*, from the plant of that name. This very ingenious conjecture of Bishop *Clayton*, which furnished a clue to the construction of his map, p. 383, is confirmed by the preceding station of *Hazeroth*, (No. 18.) which is placed also immediately before *Kadesh-Barnea*, Numb. xii. 16; xiii. 3—26.

2. On the other hand, *Wells*, *Shaw*, the *Universal History*, &c. have greatly perplexed and obscured the geography of this Itinerary, by supposing that the latter *Kadesh* (No. 38.) was distinct from the former (No. 19.) They place the latter on the

western side of Mount *Hor*, towards the land of *Canaan*, confounding it with that *Kadesh*, in the land of the *Philistines*, where *Abraham* sojourned, Gen. xvi. 14; xx. 1. But it evidently lay on the east side of Mount *Hor;* for why should *Moses* send messengers from *Kadesh* to the king of *Edom*, requesting permission to pass through his territories, in the way to *Canaan*, if they were already at the verge of *Palestine?* Numb. xx. 14. Whereas the application was necessary, if his territories lay between. The true situation of *Kadesh* is ascertained beyond a doubt, from its lying between Mount *Hor* and *Eziongeber*, on the *Elanitic* Gulph. Numb. xxxiii. 35—37. And by rectifying this material error, Bishop *Clayton* has restored the true geography of the route.

After leaving *Kadesh Barnea* the first time, where "they abode *many days*," or years, by the divine appointment, Deut. i. 46. they were ordered "*to turn* away from the promised land, and take their journey through the wilderness towards the way of the *Red Sea*," in a south-westerly direction, Deut. ii. 1. And after passing through ten stations, they arrived at *Hashmonah*, (No. 30.) which was the utmost limit of their wanderings in that direction, because *Azmon* (which was evidently the same place) lay at the angle of the southern boundary of the promised land, where *it fetched a compass*, and ran in a north-westerly direction toward the river of Egypt, and the Great Sea, or *Mediterranean*. Numb. xxxiv. 5; Josh. xv. 4. This station, therefore, lay between the western termination of Mount *Hor*, and the head of the Red Sea, near the borders of the desart of *Shur*, or *Etham*.

To this same station, of *Hashmonah*, or *Azmon*, the *Israelites* returned again, after "they had compassed Mount *Seir* many days," Deut. ii. 1. towards the end of their wanderings for 38 years, but it was now called by a different name in the Itinerary, *Salmonah*, (No. 41.) Its identity, however, is fortunately ascertained by the venerable Septuagint version, which renders *Azmon*, Josh. xv. 4. by the same word, *Σελμωνα*, as here in the Itinerary, Numb. xxxiii. 41. And the change of name is easily accounted for: the original, צלמנה, *Tsalmonah*, being evidently derived from צלם, *Tsalam*, "an image," in allusion to the *brazen serpent* erected there by *Moses*.

The fixing these two most important stations of *Kadesh*, or *Rithmah*, and *Hashmonah*, *Azmon*, or *Salmonah*, which we owe

to the ingenuity of the Bishop of *Clogher*, furnishes a satisfactory clue to develope and delineate the mazy labyrinth of the circuitous wanderings of the Israelites for the last thirty-eight years, through the interior of *Arabia Petræa*. For, when they first arrived at *Kadesh*, (No. 19.) they turned westwards towards *Azmon;* then they turned northwards, and again eastwards, till they reached *Elath*, (No. 35.) and *Eziongeber* *, (No. 37.) and thence turned southwards and westwards till they reached *Kadesh* again, (No. 38.) thence they proceeded to *Azmon*, now *Salmonah*, again; whence they took their final departure, steering north-east, by the direct course, towards the lands of *Edom* and *Moab*.

The remarkable station, *Kibroth Hataavah*, (No. 40.) signifying "the graves of lust," because there they buried the people that lusted, or longed for flesh to eat, and who were smitten with a plague, while they were satisfying their appetites with the quails, Numb. xi. 4—34. seems also to be denoted by the station *Tophel*, Deut. i. 1. For this word was used by *Job*, in the country of *Arabia*, to denote *insipid* bread made without salt, and compared to the white of an egg for tastelessness, *Job* vi. 6. and thence perhaps was used by the *Israelites* to denote the *manna*, that "*light* bread which they loathed," and "whose taste resembled that of *fresh oil*." Numb. xi. 8.

By a fortunate discovery, the exact site of *Kibroth Hataavah* seems to be exactly ascertained by *Niebuhr*. In his way from *Suez* to Mount *Sinai*, he was brought by his guides to a lofty and steep mountain in the district of *Beni Legat*, about nineteen German miles from *Suez*, and eleven from the convent of St. *Catherine's*, at Mount *Sinai*. After an hour and half spent in climbing to the summit, he was greatly surprised to see there a superb *Egyptian* cemetery, as he reckoned it, in which were a number of stones of a fine and hard grit *(grais)* from five to seven feet long, and a foot and half, or two feet broad, loaded with hieroglyphics, as beautiful as those of *Egypt*. Some of these stones were standing upright, others overturned or broken. The inscriptions on three of these stones are copied in Plates XLV. and XLVI. of his *Voyage en Arabie*, Tom. I. p. 190. con-

* *Eziongeber*, at the head of the *Elanitic*, or Eastern Gulph of the Red Sea, is now called by the Arabs, *Meenah et Dsahab*, "the port of gold," from *Solomon's* traffic. 1 Kings ix. 26. It was therefore the *Dizahab* of Deut. i. 1.

sisting of birds, serpents, fishes, hares, and *tots*, or human figures, sitting on their hams, some with human, others with dogs' heads. But he observes, as remarkable, that though the figures of *hares* were numerous, which abound in these desarts, there were none to be found of *oxen*, so often found on the obelisks of Egypt.

Besides these, there was an oblong rectangular edifice, about fifty geometrical paces long, and about ten broad, whose walls were standing, containing in its area several of these stones, covered with hieroglyphics. In this edifice were also found busts in the Egyptian style, and architectural ornaments, like those which *Norden* copied in Upper Egypt. At the larger end was a small chamber, the roof of which was still subsisting, supported by a square pillar; and this pillar, as well as the walls around, were covered with hieroglyphics. *Niebuhr* has also given an engraving of the ground-plan of this edifice, which is divided by a cross wall into two equal parts, Plate XLIV. p. 169.

He asks, "Whether these might not be the *graves of lust*, noticed Numb. xi. 34. or else Mount *Hor*, [where *Aaron* was buried.] Numb. xxxiii. 38. But (says he) whether this be a cemetery of the *Israelites*, or of the ancient inhabitants of the country, it fails not to furnish an ample field of speculation for the learned." Tom. I. p. 189—191.

There are no traces in ancient history of any city, formerly subsisting in this part of the desart, which, though not destitute of inhabitants, never could be populous from its barren and sequestered situation. It could not be the tomb of *Aaron*, which was at Mount *Hor*, at a considerable distance: it was therefore most probably at or near *Kibroth Hataavah*, erected by the *Israelites* during their long stay in the neighbourhood of *Kadesh Barnea*, from which it was removed only two stages.

The inscriptions also on these tomb-stones are strikingly *Egyptian*, like them, engraved on hard granite, and abounding in Egyptian *tots*, among the hieroglyphic symbols. The remarkable omission of the *ox*, however, so frequent in *Egypt*, intimates, that they were not the work of *Egyptians*, properly speaking, but rather of the *Israelites*; still smarting with the recollection of the severe chastisement they had received not long before for their idolatry of the *golden calf* at *Sinai*, and not daring to introduce that ominous symbol among the other Egyptian hieroglyphics. These, therefore, might have been the

tomb-stones of the princes of the congregation who perished there. Ps. lxxviii. 31.

The smaller *birds* in the engravings correctly represent the *quails*, which satisfied their longing for flesh meat. The quail of the desart, according to *Hasselquist*, very much resembles the red partridge, but is not larger than the turtle-dove. The Arabs bring many thousands of them to sell at *Jerusalem* about Whitsuntide. *Moses* represents the quails as brought by "*a wind from the sea*," Numb. xi. 31. which the Psalmist calls "*a south-east wind*," Psalm lxxviii. 28. The southerly monsoon begins to blow in Egypt about *April*, and brings with it many of the birds of passage, as turtles, quails, &c. flying northwards to more temperate climes, in order to avoid the sultry heats. *Josephus* states, that quails breed in greater numbers than any other birds about the Arabian gulf; and that this extraordinary flight, through fatigue, flew so near the ground, as to be within reach of the Israelites, "*two cubits from the face of the earth*," or within a yard of the ground, Numb. xi. 31. so that they could easily knock them down, as the *Arabs* do at present, with sticks.

This extraordinary flight of quails spent *two days and a night* in passing, during which the Israelites might have procured a sufficient supply to last them for a whole month, by spreading them "all round about the camp," to dry in the sun, according to the Arab usage. The same hot wind which brought the quails, by its continuance, probably produced sickness and mortality in the camp of the Israelites, as it does at present in *Egypt*, according to *Maillet*.

The quails, therefore, were not *locusts*, as imagined by *Ludolfus*, in his Ethiopian History, and adopted by Bishops *Patrick*, *Clayton*, and others; a notion utterly incompatible with the Psalmist's representation of the miracle: "HE rained *flesh* upon them as dust, and *feathered fowls* as the sand of the sea." Ps. lxxviii. 27.

The larger birds in the engravings might also denote the *eagle*, which haunts the desarts of *Arabia*. And from the parent eagle training his young brood to fly, which *Moses* might often have witnessed, was borrowed that inimitable imagery of the *Israelites*, "whom GOD bore on *eagles'* wings, and brought unto himself." Exod. xix. 4.

> "HE found him *(Israel)* in a desart land,
> And in a waste howling wilderness;

> He led him about, He instructed him,
> He kept him as the apple of his eye.
> As the *eagle* stirreth up his nestlings,
> Hovereth about his brood,
> Spreadeth abroad his wings,
> Taketh them up,
> Carrieth them upon his shoulder:
> [So] THE LORD alone did lead him;
> And with HIM was no *strange God*."—Deut. xxxii. 10—12.

Indeed, the minute coincidence of this cemetery, in every respect, with the occurrence at *Kibroth Hataavah*, raises the conjecture almost to a certainty, that this could be no other than that remarkable station, which was no more than three stages from Mount *Sinai*, (No. 14.)

The circumstance which led to this happy discovery of *Niebuhr*, and which serves also to establish the foregoing conjecture, was his curiosity to visit *Jebel al Mokatteb*, "the written mountains," which lay in that neighbourhood, which had been seen and described by the *Prefetto* of Egypt, sent thither by the Congregation *de propagandâ fide* at Rome.

In his journal, published by Bishop *Clayton*, the *Prefetto* observes:—"After passing the mountains of *Faran* [or *Paran*] we came to a large plain surrounded by high hills. These hills are called *Gebel el Mokatab*, which we passed by for an hour together, and found engraved with *ancient unknown characters*, cut into the hard marble rock, and so high, as to be in many places at twelve or fourteen feet above the ground, carved with the greatest care, in a place where there is neither water nor provisions to be procured."

These inscriptions, so carefully engraved, and at such a height, are quite distinct from the trivial memorandums of modern passengers, frequently found in the neighbourhood. They also might have been hieroglyphics of the same nature as those at the cemetery. *Niebuhr*, in his map, places *El Mokatab* next to the Mountain of the Cemetery, westwards, or nearer than it to *Suez*.

The remarkable station of *Rephidim*, in that neighbourhood, (No. 13.) which lay westwards of Mount *Sinai*, (No. 14.) still preserves that wonderful relic of antiquity, the rock of *Massah*, "temptation," and *Meribah*, "chiding," because there "the children of *Israel tempted* the LORD, and chided with *Moses*." Exod. xvii. 2; 1 Cor. x. 9. It is thus described by *Pococke*:—

"This rock is on the foot of Mount *Serich*, and is a red granite stone, fifteen feet long, ten wide, and about twelve high. On both sides of it, towards the south end, and at the top of the stone, for about the breadth of eight inches, it is discoloured, as if by the running of water; and all down this part, on both sides, and at top, are a sort of openings, or mouths, some of which resemble the lion's mouth, that is sometimes cut in stone spouts, but appears not to be the work of a tool. There are about twelve on each side, and within every one is a horizontal crack, and in some also a crack down perpendicularly. There is also a crack from one of the mouths next the hill, that extends two or three feet to the north, and all round the south end. The Arabs call this the stone of *Moses*." *Pococke's* Travels, p. 148.

Shaw also gives this further description: "It lies tottering, as it were, and loose, in the middle of the valley; and seems formerly to have belonged to Mount *Sinai*, which hangs in a variety of precipices all over this plain."—"The *Arabs*," says he, "who were our guard, were ready to stone me, for attempting to break off a corner of it."—This enhances the miracle: since the water must have been supplied from the rock itself, and not from the ground, which is detached from it: when "God did cleave the rocks in the wilderness, and gave them drink, as out of the great abyss." Psalm lxxviii. 15.

The famous mountain adjoining is called indiscriminately in Scripture *Horeb* and *Sinai*. The former seems to be the general name of the whole mountain, signifying "a desart;" the latter appropriated to its highest summit. Thus the rock at *Rephidim* is called "the rock in *Horeb*," Exod. xvii. 6. and "the law was given in *Horeb*," Deut. v. 2. but "from Mount *Sinai*," Exod. xix. 18—23. *Sinai* is derived from *Sene*, "a bush," Exod. iii. 2. or a *bramble* bush.

"*Sinai*," says *Sandys*, "has three tops of a marvellous height; that on the west side, where God appeared to *Moses* in a bush, fruitful in pasturage; far lower than the middlemost, and shadowed when the sun riseth thereon; which is that whereon God gave the law to *Moses*, and which is now called the Mount of *Moses;* at the foot of which stands the monastery called *St. Catherine's*, from which there were steps formerly up to the very top of the mountain, and were computed 14,000 in number. At present some of them are broken, but those that remain are well made, and easy to go up and down. There are, in several places

of the ascent, good cisterns, and especially near the top, a fair and good one. The third or most easterly summit, is called by the religious in those parts, Mount *Catherine;* on the top of which there is a dome, under which they say was interred the body of this saint, brought thither by angels after she was beheaded at *Alexandria.*" One may judge of the height of St. *Catherine's* Mount, which certainly is not so high as that of *Moses* by a third part, from this circumstance, that *Thevenot* found much snow on both, when he was there, which was in *February.* The monastery of St. *Catherine* is from *Cairo* some eight days' journey over the desarts, according to *Sandys*, p. 96. See *Wells*, Vol. II. p. 105; and *Niebuhr* has given a drawing of the convent of St. *Catherine*, and of the rugged precipices of *Sinai* behind it. Plate XLVII. Tom. I. p. 197.

In one of the roads from the convent of *Sinai* to *Suez*, there is exactly such another stone as the rock of *Massah*, with the same sort of openings all down, and the signs where the water ran. "I was desirous to pass by it on my return (says *Pococke)*, but unfortunately was led another way. I asked the Arabs about it, who told me that it was likewise called the stone of *Moses.*"— "The way to it is by the valley of *Sheik Salem*, being about sixteen miles from the convent, to the north-west," p. 147. Afterwards, he says, that *Kadesh* was about eight hours north or north-west of Mount *Sinai*, p. 157. The reason, says he, why I am so particular, is because it is said, that this must be the rock *Meribah Kadesh*, Deut. xxxii. 51. which *Moses* smote twice, and the waters came out abundantly, after they had returned into these parts, from *Eziongeber.*

This rock of *Meribah Kadesh*, therefore, furnishes an additional land-mark for determining the important station of *Kadesh Barnea* with geographical accuracy.

When thirty-eight years were expired from the time of the rebellion at *Kadesh Barnea*, or thirty-nine and a half from the *Exode*, the LORD said unto *Moses*, "Ye have compassed this mountain *(Hor* or *Seir)* long enough; turn you *northward.*" Deut. ii. 2, 3.

From inspection of the map, it appears that the Israelites were at this time encamped at *Zalmonah*, (No. 41.) their farthest station in the south-west direction; where the murmurers were destroyed by fiery flying serpents, and the faithful saved or cured by looking at the *brazen serpent*, that wondrous emblem of

CHRIST crucified, to which our Lord himself alludes:—"As *Moses* lifted up the serpent in the wilderness, even so must THE SON OF MAN be lifted up:"—"And I, if I be lifted up, *will draw all men unto me*," John iii. 14; xii. 32; so finely foretold by *Isaiah*, "Lift up a standard to the nations! Lo, the Lord hath proclaimed to *the end of the earth*, Say ye to the daughter of *Sion*, *Lo, thy Saviour cometh!*" Isa. lxii. 10.

In marching northwards, they were ordered not to molest the kindred nations of the *Edomites* and *Moabites*, through whose territories they were obliged to pass. Deut. ii. 4—9. At first, indeed, the *Edomites* refused them a passage, and actually came out to oppose them by force, whereupon "*Israel* turned away from them." Numb. xx. 14—21. The *Moabites* also probably refused them at this time, for both refusals are noticed together, Judg. xi. 17. Afterwards, however, the Lord interposed, and *made them afraid of the Israelites*, for the *Edomites* did not obstruct their passage through the several stations of *Punon* (No. 42.) and *Oboth*, (No. 43.) by the way of the plains of *Eloth* and *Eziongeber* *, or by the way of the Red Sea, not far from the head of the *Elanitic* gulph. Numb. xxi. 4—10; Deut. ii. 29.

At the next station, *Jim*, or *Jie Abarim*, (No. 44.) they reached the borders of *Moab*, and next passed the valley and brook *Zered*, (No. 45.) and went quietly on through *Ar*, in the territory of *Moab*, and pitched over against the children of *Ammon*, on the other side of *Arnon*, (No. 46.) Numb. xxi. 12—15; Deut. ii. 13—19. "The other side of *Arnon*," was the south side of the river *Arnon*, which they did not pass over till after the prohibition not to molest the *Ammonites*, Deut. ii. 19—24. *Moses*, therefore, wrote the book of *Numbers* on the north side of the river, after the conquest of *Sihon*, king of the *Amorites*, who had refused them a peaceable passage through his territories, Deut. ii. 26—34. as judiciously observed by *Clayton*, p. 422.

Their next station was *Beer*, (No. 47.) or *Beer Elim*, "the well of the princes," as it is called by *Isaiah*, xv. 8; because there God supplied them with water. "Then *Israel* sang this song: Spring up, O well, sing ye unto it: The princes digged the well, the nobles digged it with their staves, by [the direction of] the lawgiver," *(Moses.)* Numb. xxi. 16—18.

At the next station, *Jahaz*, (No. 48.) they overthrew *Sihon*,

* *Eziongeber* was two days' journey from Mount *Sinai*, according to *Shaw*; but three days' journey, according to *Pococke*.

and all his people, and smote them with the edge of the sword, and took all his cities from *Aroer*, which is by the brink of the river *Arnon* (southwards) and *Heshbon*, his capital city, in the valley between *Arnon* and *Jabbok*, even unto *Gilead* (northwards). Numb. xxi. 23—32; Deut. ii. 32—36.

It was now indeed that "God began to put the dread and fear of the *Israelites*" upon all the neighbouring nations, Deut. ii. 25. and that he hardened the spirit of *Sihon*, and made his heart obstinate to refuse them a passage. For this whole territory of his was an usurpation, he having subdued the *Moabites*, the original possessors, and seized all their lands and cities, *Heshbon*, *Ar*, *Dibon*, from *Arnon* even to *Medeba*, as recorded in a proverb, or popular song. Numb. xxi. 26—30; Deut. ii. 30, 31.

Then the *Israelites* turned away from the *Ammonites*, eastwards, to attack *Og*, the king of *Bashan*, who had joined *Sihon* against them, Deut. xxix. 7. and defeated him and all his people at *Edrei*, (No. 51.) "And they took at that time out of the hand of the two kings of the *Amorites (Sihon* and *Og)*, all their land on this (the eastern) side of *Jordan*, from the river *Arnon* (southwards) unto Mount *Hermon*" (northwards), Deut. iii. 8. which was bounded eastwards by the wilderness of *Kedemoth* (signifying "eastern"), that great wilderness which reached to the river *Euphrates*, Deut. ii. 26; Judg. xi. 22. and westwards, by the land of the *Ammonites*, and the remnant of the land of the *Moabites;* from which it was separated by a great chain of mountains, which formed, "a strong border," or barrier, which *Sihon* could not force, Numb. xxi. 24. This mountainous border, therefore, separated these eastern *Amorites* from the western, beyond *Jordan*, and also from the plains of *Moab*, on the coasts of *Jordan*, which belonged to the *Moabites*, *Midianites*, and *Ammonites* conjointly; according to the judicious interpretation of this detached part of their journey, which is not noticed in the Itinerary by *Clayton*. P. 425—429.

These conquered lands, and "cities of the plain," being fit for pasturage, were allotted, at their own request, to the tribes of *Reuben* and *Gad*, and the half tribe of *Manasseh*, which abounded in cattle, on the condition of their assisting the other tribes in the conquest of the promised land, westwards of the *Jordan*. Numb. xxxii. 1—42; Deut. iii. 8—20.

Hence the fifty-second station is called in the Itinerary,

Dibon Gad, as belonging to that tribe, in order to distinguish it from another *Dibon*, belonging to the *Reubenites*, Josh. xiii. 7.

Dibon Gad was on the northern border of the territories of *Sihon*, Numb. xxi. 30. thence they turned back again to *Almon Diblathaim*, (No. 53.) or *Diblath*, on the edge of the wilderness of *Kedemoth*, Ezek. vi. 14. from thence they proceeded southwards to *Mattanah*, (No. 54.) from thence westwards to *Nahaleel*, (No. 55.) from thence, in the same direction, to *Bamoth*, (No. 56.) in the valley belonging to *Moab*, into which they entered peaceably, and proceeded northwards again to the top of *Pisgah*, (No. 57.) which looked towards the wilderness, eastwards. N. B. These last three stations lay in the mountains of *Abarim*, before *Nebo*, Numb. xxxiii. 47. From thence they crossed the mountains, westward, and pitched in the plains of *Moab*, on this side *Jordan* (or the eastern), opposite to *Jericho*, and abode in *Shittim*, or, as it was afterwards called, *Abel Shittim*, or "the mourning of *Shittim*," from the slaughter of the *Israelites* there for their whoredoms and idolatry with the daughters of *Moab* and *Midian*, in the matter of *Baal Peor;* which was the same as *Chemosh*, the obscene divinity of the *Moabites*, the *Lingam* of the *Hindus*, the *Phallus* of the *Egyptians* and *Greeks*, and the *Priapus* of the *Romans ;* representing the generative powers of nature residing principally in *Baal*, the Sun.

To punish the *Moabites* and *Midianites* for seducing the *Israelites*, a severe retaliation was inflicted: a party of twelve thousand men was sent under the conduct of the zealous *Phineas*, who slew all their males of the age of puberty, and all their women that were not virgins, burnt their cities, and spoiled their goods, Numb. xxxi. 6—18. And now their lands also were distributed among the tribes of *Reuben*, *Gad*, and *half Manasseh*, Josh. xiii. 32. which, before their transgressions, had been reserved; and a law was made, that no *Moabite* or *Ammonite* should be admitted into the magistracy, or the freedom of the congregation of *Israel*, until the tenth generation. Deut. xxiii. 10.

PASSAGE OF THE RIVER JORDAN BY THE ISRAELITES.

This miraculous passage was performed on the tenth day of the first month, wanting only five days to complete forty years from the day the Israelites left Egypt, on the fifteenth day of the first month. Numb. xxxiii. 3; Josh. iv. 19.

The circumstances attending it were as follows:—

The Ark of the Covenant, by the Divine direction, was borne by the priests before the body of the people on their march, about 2000 cubits, or 1000 yards. As soon as the feet of the priests had touched the brim of the waters of the river, which then was swollen, and overflowed its banks, about "*barley harvest*," or about the vernal equinox, from the melting of the snows on *Hermon*, *Antilibanus*, and the mountains of Syria; immediately the waters recoiled upwards, stood on heaps, and went backwards a considerable way, while the lower waters pursued their course to the *Dead Sea*, leaving the channel dry.

Then the priests, bearing the Ark, entered the bed of the river, and stood still when they had reached the middle, while the congregation hastily passed over below them, at the same distance of 2000 cubits; and as soon as the people had all passed over, then the priests proceeded also with the Ark to the further bank. And immediately, when the soles of their feet touched the dry land, the suspended waters of the river above returned to their place, and overflowed the banks as usual. Josh. iii. 6—17.

The passage of this deep and rapid, though not wide river, at the most unfavourable season, was more manifestly miraculous, if possible, than that of the *Red Sea;* because here was no natural agency whatsoever employed; no mighty wind to sweep a passage, as in the former case; no reflux of the tide, on which minute philosophers might fasten to depreciate the miracle. It seems, therefore, to have been providentially designed to silence cavils respecting the former; and it was done in the noon-day, in the face of the sun, and in the presence, we may be sure, of the neighbouring inhabitants; and struck terror into the kings of the *Amorites* and *Canaanites*, westwards of the river, "*whose hearts melted, neither was there any spirit in them any more, because of the children of Israel.*" Josh. v. 1.

To record this memorable event to the latest posterity, *Joshua* was commanded to erect two monuments of twelve stones each, taken out of the bed of the river; the one upon the bank, the other in the middle of the channel, where the priests had rested with the Ark. And the ford, or place of passage, was called *Beth Abara,* "the house of the passage," until our Saviour's time." Josh. iv. 8, 9; John i. 18.

BOUNDARIES OF THE PROMISED LAND.

By the *Abrahamic* covenant, the original grant of this land to the *Israelites* was "from the river of *Egypt* (southwards) to the great river, the river *Euphrates,*" (northwards.) Gen. xv. 18.

"The river of *Egypt,*" which is here contrasted with the river *Euphrates,* must also be "a great river," and a marked boundary, about which there could be no dispute; and this was no other than the river *Nile,* whose eastern or *Pelusiac* branch was reckoned the boundary of *Egypt,* towards the great desart of *Shur,* which lies between *Egypt* and *Palestine,* and which is about ninety miles in breadth; and this is confirmed by a comparison of parallel passages:

From the entering in of *Hamath* [in *Syria,* northwards] unto the river of *Egypt,* [southwards] 1 Kings viii. 65; 2 Chron. vii. 8. evidently corresponds to, "From *Sihor* of *Egypt,* to the entering in of *Hamath,*" 1 Chron. xiii. 5. Therefore, "*Sihor,*" and "the river of *Egypt,*" are the same. But it appears from another passage, that *Sihor* was the *Nile:* "And now what hast thou to do in the way of *Egypt,* to drink the waters of *Sihor?* or, what hast thou to do in the way of *Assyria,* to drink the waters of the river?" *(Euphrates.)* Jer. ii. 18. Here *Sihor,* or the *Nile,* is plainly contrasted, in situation, with the *Euphrates,* which was unquestionably the river of *Assyria,* as in the original *Abrahamic* covenant.

The Hebrew name, *Sihor,* signifies "black;" and it is an apt epithet of the *Nile,* bringing down with its flood from *Abyssinia,* a rich, black, loamy sand, which fertilizes the Lower Egypt, as accurately described by *Virgil:*—

> Et viridem Ægyptum *nigrâ* fœcundat arenâ.
> *Georg.* IV. 291.

From *Sihor,* or *Sihr,* was derived the Ethiopian name of the river *Siris;* and this was translated into various languages. *Dio-*

dorus remarks, that the *Egyptian* name of the river was *Okeames*, from *Okema*, or *Okem*, signifying "black;" whence also it was styled by the *Greeks*, *Melas* and *Melo*, and by the *Hindus*, "*Cali*:" all of the same import.

From a solitary passage in the Septuagint version, rendering "the stream, or the river of *Egypt*," Isa. xxvii. 12. by "*Rhinocorura*," a city of *Palestine Syria*, built on the borders of the desart which separates that country from *Egypt*, it has been supposed to denote a stream or torrent near that city, by *Augustine*, and by some respectable modern geographers, *Wells*, *Cellarius*, *Bochart*, &c. But none of the old geographers, *Strabo*, *Mela*, *Pliny*, *Ptolomy*, &c. notice any such stream or torrent there; and even admitting that there was, it would not deserve to be contrasted with the *Euphrates*.

II. The boundaries of the Promised Land are thus accurately described by *Moses* before the entrance of the *Israelites* into it, Numb. xxxiv. "When ye come into the land of *Canaan*, (this is the land that shall fall unto you for an *inheritance*, even the land of *Canaan*, with the coasts thereof:) Your *south quarter* shall be from the wilderness of *Zin*, along by the coast of *Edom*," or *Idumæa*. This was its general description. The boundary itself is next traced: "And your south border shall be the utmost coast of the *Salt Sea* eastward;" or as explained by *Joshua's* description afterwards, (xv. 2—4.) "the south border of the tribe of *Judah* began from the bay of the *Salt Sea* that looketh southward;" or by combining both, from the south-east corner of the Salt Sea, or *Asphaltite* lake. "From thence, your border shall turn southwards to the ascent of *Acrabbim*," or the mountains of *Accaba*, (signifying "ascent" in Arabic) which run towards the head of the *Elanitic*, or Eastern gulf of the Red Sea; passing (we may presume, with *Clayton*) through the seaports of *Elath* and *Eziongeber*, on the Red Sea, which belonged to *Solomon*, 1 Kings ix. 26. though they are not noticed in this place.

"Thence it shall pass on to [the wilderness of] of *Zin*," on the east side of Mount *Hor*, including that whole mountainous region within the boundary; "and the going forth thereof shall be to *Kadesh Barnea* southwards; and it shall go on to *Hazar Addar* *, and pass on to *Azmon*."

* *Joshua* (xv. 3.) interposes two additional stations, *Hezron* and *Kirkaa*, before and after *Adar*, or *Hazer Adar*, which are not noticed by *Moses*.

" And the border shall fetch a compass," or form an angle, " from *Azmon*," or turn westwards " towards the river of *Egypt*," or *Pelusiac* branch of the Nile; " and its outgoings shall be at the sea," the *Mediterranean*.

This termination of the southern border westwards, is exactly conformable to the accounts of *Herodotus* and *Pliny:* the former represents Mount *Casius* lying between *Pelusium* and the *Sirbonic* lake, as the boundary between *Egypt* and *Palestine Syria*, (3, 5.) the latter reckoned the *Sirbonic* lake itself as the boundary, (Nat. Hist. 5, 13.)

" And as for the western border, ye shall have the Great Sea for a border. This shall be your west border." The Great Sea is the *Mediterranean*, as contrasted with the smaller seas or lakes, the *Red Sea*, the *Salt Sea*, and the sea of *Tiberias*, or *Galilee*.

And this shall be your north border: from the Great Sea you shall point out *Hor ha-hor*, (not " Mount *Hor*," as unskilfully rendered in our English Bible, confounding it with that on the southern border, but) " the mountain of the mountain *," or, " the double mountain," or Mount *Lebanon*, which formed the northern frontier of *Palestine*, dividing it from *Syria ;* consisting of two great parallel ranges, called *Libanus* and *Antilibanus*, (derived from *Leban*, " white," because their summits are usually covered with snow) and running eastwards from the neighbourhood of *Sidon* to that of *Damascus*.

" From *Hor ha-hor* ye shall point your border to the entrance of *Hamath ;*" which *Joshua*, speaking of the yet unconquered land, describes, " All *Lebanon*, towards the sun-rising, from (the valley of) *Baal Gad*, under Mount *Hermon*, unto the entrance of *Hamath*," Josh. xiii. 5. This demonstrates, that *Hor ha-hor* corresponded to all *Lebanon*, including Mount *Hermon*, as judiciously remarked by *Wells*, Vol. II. p. 271. who observes, that it is not decided which of the two ridges, the northern or the southern, was properly *Libanus ;* the natives at present call the southern so, but the Septuagint and *Ptolomy* called it *Antilibanus*.

" From *Hamath* it shall go on to *Zedad*, and from thence to *Ziphron*, and the goings out of it shall be at *Hazar Enan*,

* The Septuagint Version has judiciously rendered it, *παρα το ορος το ορος*, " the mountain beside the mountain."

(near *Damascus*, Ezek. xlviii. 1.) This shall be your north border."

And ye shall point out your east border from *Hazar Enan* to *Shephan*, and the coast shall go down to *Riblah*, on the east side of *Ain* (" the fountain" or springs of the river *Jordan)* and the border shall descend, and shall reach unto the [east] side of the sea of *Chinnereth*, (or sea of *Galilee*, or lake of *Tiberias*, thence probably called *Gennesareth* in our Saviour's time.) " And the border shall go down to *Jordan* on the east side, and the goings out of it shall be at the *Salt Sea*." There it met the southern border, at the south-east corner of that sea, or the *Asphaltite* lake.

" This shall be your land with the coasts thereof round about" in circuit.

Such was the admirable geographical chart of the Land of Promise, dictated to *Moses* by the GOD OF ISRAEL, and described with all the accuracy of an eye-witness.

In his first expedition, *Joshua* subdued all the southern department of the Promised Land, and in his second the northern, having spent five years in both, Josh. xi. 18. What *Joshua* left unfinished of the conquest of the whole, was afterwards completed by *David* and *Solomon*. In the reign of the latter was realized the *Abrahamic* covenant in its full extent.

" And *Solomon* reigned over all the kingdoms from the river *(Euphrates)* unto the land of the *Philistines*, and the border of *Egypt* :—for he had dominion over all the region on this side of the river *(Euphrates)* from *Tipsah* (or *Thapsacus*, situated thereon) even to *Azzah* (or " *Gaza* with her towns and villages, unto the river of Egypt," southward, " and the Great Sea," westward, *Josh*. xv. 47.) even over all the kings on this side the river *(Euphrates.)* 1 Kings iv. 21—24.

THE DEVOTED NATIONS OF CANAAN.

Four hundred years before the event, the fate of these nations was revealed to *Abraham*. The long-suffering of God waited so long, " till their iniquities should come to the full." Gen. xv. 16. It was for the wickedness of these nations they were expelled; and the *Israelites* were put in possession of their land, not for their own righteousness or merits, for they were a *stiff-necked*

people, but to perform the covenant which GOD made with their fathers, *Abraham*, *Isaac*, and *Jacob*. Deut. ix. 4—6.

These nations had repeated warnings from God, to repent and reform their evil ways, in an awful succession of judgments, signs, and wonders, inflicted on the neighbouring nations for their wickedness. First, in the signal destruction of the cities of the plain, *Sodom*, *Gomorrah*, *Admah*, *Zeboim*, by the immediate vengeance of Heaven, destroyed by fire and brimstone, or lightning, and overwhelmed by the *Salt Sea:* Secondly, in the plagues of Egypt, and destruction of the Egyptians in the *Red Sea*, forty years before, for abominations resembling their own, Levit. xviii. 3. Thirdly, in the recent destruction of their neighbours, the Eastern *Amorites*, and the miraculous passage of the river *Jordan*. All these terrified, but did not reform them.

" I know," said *Rahab*, the harlot, to the spies, " that the LORD hath given you the land, and that your terror is fallen upon us, and that the inhabitants of the land faint because of you," Josh. ii. 9. The *Gibeonites*, in excuse for deceiving the *Israelites* into a league, pleaded, " It was certainly told thy servants, that THE LORD THY GOD commanded *Moses* to give you all the land, and to destroy all the inhabitants of the land from before you: therefore we were sore afraid of our lives because of you, and have done this thing," Josh. ix. 24. Here was no charge of cruelty or injustice brought forward by these sinners themselves, who are such objects of commiseration to modern philanthropists!

In *Abraham's* days, the land was occupied by ten nations: the *Kenites*, the *Kenizzites*, and the *Kadmonites*, eastwards of *Jordan;* and westwards, the *Hittites*, the *Perizzites*, the *Rephaims*, the *Amorites*, the *Canaanites*, the *Girgashites*, and the *Jebusites*, Gen. xv. 18—21.

These latter, in the days of *Moses*, were called, the *Hittites*, the *Girgashites*, the *Amorites*, the *Canaanites*, the *Perizzites*, the *Hivites*, and the *Jebusites*, Deut. vii. 1; Josh. iii. 10; xxiv. 11; the *Hivites* being substituted for the *Rephaims*.

These seven nations were thus distributed :—

" The *Hittites*," or sons of *Heth*, " the *Perizzites*, the *Jebusites*, and the *Amorites*, dwelt in the mountains," or in the hill country of *Judea*, southwards; " the *Canaanites*" dwelt in the midland, " by the sea," westwards, and " by the coast of *Jordan*," eastwards; and " the *Girgashites*," or *Gergesenes*, along the

eastern side of the sea of *Galilee;* and " the *Hivites*" in Mount *Lebanon*, under *Hermon*, in the land of *Mispeh*, or *Gilead*, northwards. Compare Numb. xiii. 29; Josh. xi. 3; Judg. iii. 3; and Matt. viii. 28.

The *Canaanites*, as distinguished by the family name from the other tribes, called after the sons of *Canaan*, probably were a mixture of the descendants of the other sons of *Canaan*, who were driven out of their original settlements by the *Philistines*, who occupied *Gaza*, which belonged to them, Gen. x. 15—20. and forced to settle farther backwards, towards the coasts of *Jordan*, according to the conjecture of *Wells*, Vol. II. p. 256—267.

Of all these nations, the *Amorites* grew the most powerful, so as to extend their conquests, beyond the river *Jordan*, over the *Kadmonites*, or " Easterns." Hence they are sometimes put for the whole: " The iniquity of the *Amorites* is not yet full, Gen. xv. 16. " The gods of the *Amorites*, in whose land ye dwell," Josh. xxiv. 15. " The *Gibeonites* were of the remnant of the *Amorites*," 2 Sam. xxi. 2.

The departments of *Canaan*, lying nearer to *Egypt*, were more corrupt than the northern, and of course received severer chastisement. For " *Joshua* smote all the country of the *hills*, and of the *south*, and of the vale, and of the springs, and all their kings. He left none remaining, but utterly destroyed all that breathed, as the Lord God of Israel commanded. So *Joshua* smote them from *Kadesh Barnea*, (eastwards) even unto *Gaza*, (westwards) and all the country of *Goshen*, (southwards) even unto *Gibeon*, (northwards.") Josh. x. 40, 41.

The Divine command, indeed, was most express: " Of the cities of these people, which the Lord thy God doth give thee for an inheritance, *thou shalt save alive nothing that breatheth, but thou shalt utterly destroy them.*" Deut. xx. 16, 17.

Still, however, the command was not absolute; it admitted of exceptions; it was to be literally inflicted only on those who opposed the *Israelites.*

Thus, 1. Amidst the general slaughter of the inhabitants of *Jericho*, *Rahab*, the harlot, and all her family, were spared; and she was even married to one of the princes, the prince of *Judah (Salmon)* the progenitor of CHRIST, Matt. i. 5. though intermarriages with the devoted nations were most expressly prohibited, in order to prevent seduction to idolatry. Deut. vii. 3, 4.

2. The *Gibeonites*, after the destruction of *Jericho* and *Ai*, in

their neighbourhood, would not oppose the Israelites, but made a fraudulent league with them, under pretext that they came from a distant country, lying beyond the devoted pale, and yet, notwithstanding the fraud, the princes of the congregation adhered to the treaty, and *let them live, lest wrath should be upon them* if they violated it; but they degraded them to a state of slavery.

3. The " cities which *stood still in their strength*," or did not attack the Israelites, " *Israel* burned none of them," Josh. xi. 13. Hence, the strong fort of *Jebus*, at *Jerusalem*, was maintained by the *Jebusites*, the original proprietors, and was not reduced until *David's* reign, 2 Sam. v. 5—9. and the remnant who escaped the slaughter in battle entered into *fenced cities*. Josh. x. 20.

4. How soon the conquered countries recruited their strength, is evident from the several servitudes of the Israelites to the *Moabites*, *Canaanites*, and *Midianites*. *Jabin*, king of *Canaan*, only fifty-six years after *Joshua's* death, had no less than 900 chariots of iron, and mightily oppressed the children of *Israel* for twenty years. Judg. iv. 2, 3.

5. The *Philistines*, on the sea-coast southwards, were not subdued till *David's* days; and the *Sidonians* and *Tyrians*, northwards, never were subdued at all.

6. The case of the reprobate *Canaanites*, whose hearts GOD is said to have hardened to fight against the Israelites, that He might destroy them utterly, and *that they might have no favour*, Josh. xi. 20. plainly intimates, that they might have had *favour*, had they repented, and submitted.

7. But when the reprobates were destroyed, the survivors might, and probably did, in many instances, repent and reject their idolatries, and turn to the LORD GOD OF ISRAEL. And this seems to be implied in the remark, that " *none moved his tongue against the children of Israel*," Josh. x. 20. But if so, every principle of religion and sound policy forbad their extermination, when they might become proselytes to the true religion, and faithful subjects. *Uriah*, the *Hittite*, was as brave and loyal an officer as any in *David's* army; and *Araunah*, the *Jebusite*, as religious as *David* himself, when he surrendered, as " a king," or as proprietor, his threshing-floor on Mount *Moriah*, to build thereon an altar of sacrifice, on the future site of the temple. 2 Sam. xxiv. 23.

Hence we do not find any censure passed on *Solomon*, when "he levied a tribute of bond service upon all the people that were left of the *Amorites*, *Hittites*, *Perizzites*, *Hivites*, and *Jebusites*—their children that were left after them in the land, whom the children of Israel were *not able* utterly to destroy," 1 Kings ix. 20, 21. as specified of the *Jews*, *Benjamites*, *Manassites*, *Ephraimites*, *Zebulonites*, *Asherites*, *Naphthalites*, and *Danites*, Judg. i. 19—34.

There is no foundation, therefore, for the charges of extreme cruelty and injustice, brought idly and blasphemously against the God of Israel, and his chosen people, as if the case of the devoted nations of *Canaan* was irreconcileable with the Divine Attributes, and with the rights of nations, by *Deists*, *Infidels*, and *false Philanthropists.* If blame is to attach any where, it is to the *Israelites;* when able, they were *not willing* to inflict the Divine sentence on the justly-devoted nations, who "served *Baalim* and *Ashteroth*," or the sun, moon, and stars; who made their children pass through the fire, or burnt them alive as sacrifices to *Moloch;* who worshipped obscene idols, as *Baal-peor*, *Chemosh*, &c. who practised the most execrable vices and impurities, not fit to be named, of which a frightful catalogue is exhibited, Levit. xviii. and elsewhere; and whose abominations were so enormous, that the land itself, in the energetic language of Scripture, *vomited forth her inhabitants!* And from this criminal neglect and false compassion, "these nations were left to be *pricks in their eyes*, and *thorns in their sides*," so as by tempting the *Israelites* to follow their abominations, to transfer that vengeance to themselves which was intended for the others. Numb. xxxiii. 53—56.

OTHER NATIONS OF CANAAN.

Besides these devoted nations, there were others settled in the land at the arrival of the Israelites. In addition to the *Moabites* and *Ammonites*, the descendants of the incestuous sons of *Lot*, Gen. xix. 37, 38. and the *Midianites*, descended from *Midian*, a son of *Abraham*, by *Keturah*, Gen. xxv. 4. who lived together on the east side of *Jordan;* the *Edomites*, or descendants of *Esau*, settled southwards of the former in Mount *Hor*, or *Seir;* the *Amalekites* settled in the south coast, westwards of *Jordan*, descended from *Amalek*, grandson of *Esau*, Gen. xxxvi. 12. who

soon became "*the first*," or most powerful, "*of these nations*," Numb. xxiv. 20. and first opposed the *Israelites* after the Exode, but were defeated and doomed to destruction, Exod. xvii. 8—16. which was begun by *Saul*, and finished by *David;* the *Kenites*, a small mountainous tribe, their neighbours, who were at peace with the Israelites, and seem to have been a branch of the *Midianites*, for the father-in-law of *Moses* was a *Kenite*, Judg. i. 16. and also a *Midianite*, Numb. x. 29. they were, therefore, spared in the destruction of the *Amalekites*, 1 Sam. xv. 6; the *Kenizzites*, another small neighbouring tribe, descended probably from *Kenaz*, a grandson of *Esau*, Gen. xxxvi. 11; and the *Avims*, or *Avites*, on the south-west coast, in *Abraham's* days, of whom was *Abimelech*, king of *Gerar*, who were afterwards subdued by the *Philistines*, "or Shepherds," expelled from *Caphtor*, or the Lower Egypt, from the land of *Goshen*, in *Jacob's* days. The *Philistines* became a powerful nation, and the most formidable opponents of the *Israelites*, and rescued from them *Gaza*, *Ashkelon*, and *Ekron*, which had been allotted to, and taken by the tribe of *Judah*, after *Joshua's* death. They had constant wars with the *Israelites*, and were not subdued till *David's* days. Compare Deut. ii. 23; Josh. xiii. 3; Gen. xxvi. 1; Judg. i. 18, &c.

On the north-west coast was *Great Zidon*, as it is styled, Josh. xi. 8. founded by the eldest son of *Canaan*, Gen. x. 15. whom the *Asherites* could not expel nor reduce, Judg. i. 31. And "*the strong city of Tyre*," a colony from *Zidon*, which they were also not able to reduce, Josh. xix. 29. not even in *David's* days, 2 Sam. xxiv. 7. These entered into treaties with the *Israelites*, and greatly corrupted them by their idolatries and abominations. *Ahab*, king of *Israel*, married *Jezebel*, the daughter of *Ethbaal*, king of the *Zidonians*, who introduced the worship of *Baal*, or the Sun, 1 Kings xvi. 31. And even *Solomon* introduced the worship of *Ashtoreth* or the Moon, the goddess of the *Zidonians*, 1 Kings xi. 5.

DIVISION OF THE PROMISED LAND.

The whole land appears to have been called *Palestine* in the days of *Moses*, Exod. xv. 14. probably from *Palisthan*, signifying "Shepherd land," in the *Sanscrit* language, which is a dialect of the ancient Syriac. By *Herodotus* it was called *Palestine*

Syria, to distinguish it from *Cœle-Syria*, northward of Mount *Libanus.*

It was styled, in general, "*the pleasant land*," Ps. cvi. 24; Dan. viii. 9. and is described by *Moses*, as "a good land, a land of hills and valleys, a land of brooks and waters, and depths, (or lakes) springing out of valleys and hills; a land flowing with milk and honey; a land of wheat and barley, and vines, and fig-trees, and pomegranates, and oil olives; a land whose stones are iron, and out of whose hills thou mayest dig brass." Deut. viii. 7—9; xi. 9—11. And *Rabshakeh*, the *Assyrian*, describes it as like his own, "a land of corn and wine, a land of bread and vineyards," Isa. xxxvi. 17. It must, indeed, have been a wonderfully rich and fertile land to produce its immense population, both before and after the conquest of the *Israelites.*

Before the death of *Moses*, the region eastward of *Jordan* was assigned to the tribes of *Reuben*, *Gad*, and *Half-Manasseh*, in order, proceeding from south to north.

After the conquests of *Joshua*, the region westward of the river *Jordan*, and its lakes, was allotted to the tribes of *Simeon*, *Judah*, and *Benjamin*, in order, from south to north, of which *Judah's* portion was the most considerable.

The northern region, midland, was allotted to the tribes of *Ephraim*, the other half of *Manasseh*, *Issachar*, and *Naphthali;* of which the lot of the sons of *Joseph*, especially *Ephraim*, was the richest and most considerable, reaching from *Jordan*, eastwards, to the *Mediterranean* Sea, westwards.

The remainder of the maritime coast, westwards, was allotted to *Dan*, *Zebulon*, and *Asher;* from the *Philistine* border, southwards, to *Zidon*, northwards; for *Zebulon* was foretold to be a maritime tribe by *Jacob*, Gen. xlix. 13. "*Zebulon* shall dwell at the haven of the sea, and he shall be for a haven for ships, and his border shall be unto *Zidon*." And *Dan* and *Asher* are declared to be so by *Deborah*, Judg. v. 17. "*Dan* remained in ships, *Asher* continued on the sea shore, and abode in his breaches."

Of the southern tribes, the most powerful was *Judah;* of the northern, *Ephraim;* whence originated a jealousy and rivalship between the two, which broke out early, and laid the foundation of that fatal schism which took place on the death of *Solomon*, by the revolt of the ten tribes, brought about by *Jeroboam*, the *Ephraimite*, who revived the Egyptian idolatry of the *golden calf*, and stationed one at each end of the new kingdom, at

Bethel southwards, and *Dan* northwards, formerly called *Lasha*, or *Laish*.

To the tribe of *Levi* no division of land was assigned: its place was supplied by the tribe of *Ephraim*, the younger of *Joseph's* sons, Josh. xiv. 4. But it was abundantly compensated; "for *the priesthood of* THE LORD was their inheritance;" and they were most wisely distributed throughout the rest of the tribes, to keep up the national worship, and for the education of youth; for forty-eight cities were appropriated throughout all the tribes for the residence of the three families of the sons of *Levi*, namely, *Kohath*, *Gershon*, and *Merari*.

To the *Kohathites* were allotted twenty-three cities; namely, to the sons of *Aaron*, the high-priest, descended from *Kohath*, thirteen cities out of the tribes of *Judah*, *Benjamin*, and *Simeon;* and to the rest of that family, ten more out of the tribes of *Ephraim*, *Dan*, and *Half-Manasseh*, westwards.

To the children of *Gershon*, thirteen cities out of the tribes of *Issachar*, *Asher*, and *Naphthali*, and out of *Half-Manasseh*, eastwards.

And to the children of *Merari*, twelve cities out of the tribes of *Reuben*, *Gad*, and *Zebulon*. In all forty-eight cities.

Of these *Levitical* cities, there were thirteen that were properly *sacerdotal;* namely, those assigned to the sons of *Aaron*, to whom the priesthood was exclusively confined, for though all were *Levites*, these only could be *priests*. And the legal economy of *High-priest*, *Priest*, and *Levite*, has been adopted in the Christian, of *Bishop*, *Priest*, and *Deacon*.

It is remarkable, that all the *sacerdotal* cities lay within the southern tribes; eight belonging to *Judah*, four to *Benjamin*, which are specified, and only one to *Simeon*. Compare the lists in Joshua, xxi. 13—19; and 1 Chron. vi. 60. That one must have been *Juttah*, which is omitted in the latter list. And this may furnish a good comparative estimate of the territory of each of these tribes.

This was wisely allotted by Providence, to guard, as it were, against the evils of the schism between the southern and northern tribes. For by this arrangement, all the sacerdotal cities, except one, lay in the faithful tribes of *Judah* and *Benjamin*, to keep up the national worship in them, in opposition to the apostacy of the other tribes. And even that one sacerdotal city of *Simeon* might have remained under the controul of *Judah*, as

being situated on his frontier. Otherwise, the kingdom of *Judah* might have experienced a scarcity of priests, or have been burthened with the maintenance of those who fled from the kingdom of *Israel*, 2 Chron. xi. 13, 14. when the base and wicked policy of *Jeroboam* made priests of *the lowest of the people*, without learning or religion, to officiate in their room.

Out of all the *Levitical* cities, six were selected to be *cities of refuge*, that "the slayer who killed any person unawares, might flee thither for refuge from the avenger of blood," Josh. xx. 2. Of these, three were in the eastern departments, and three in the western, placed in the most convenient stations in the middles and extremities of the united states.

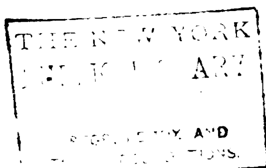
In tracing the route of the *Israelites* through the desarts of *Arabia Petræa*, in their way to *Canaan*, some confusion was occasioned by the similitude of the names of different places, or by the difference of the names assigned to the same places. Several instances of the same occur in the subsequent course of their history. To instance a few:—

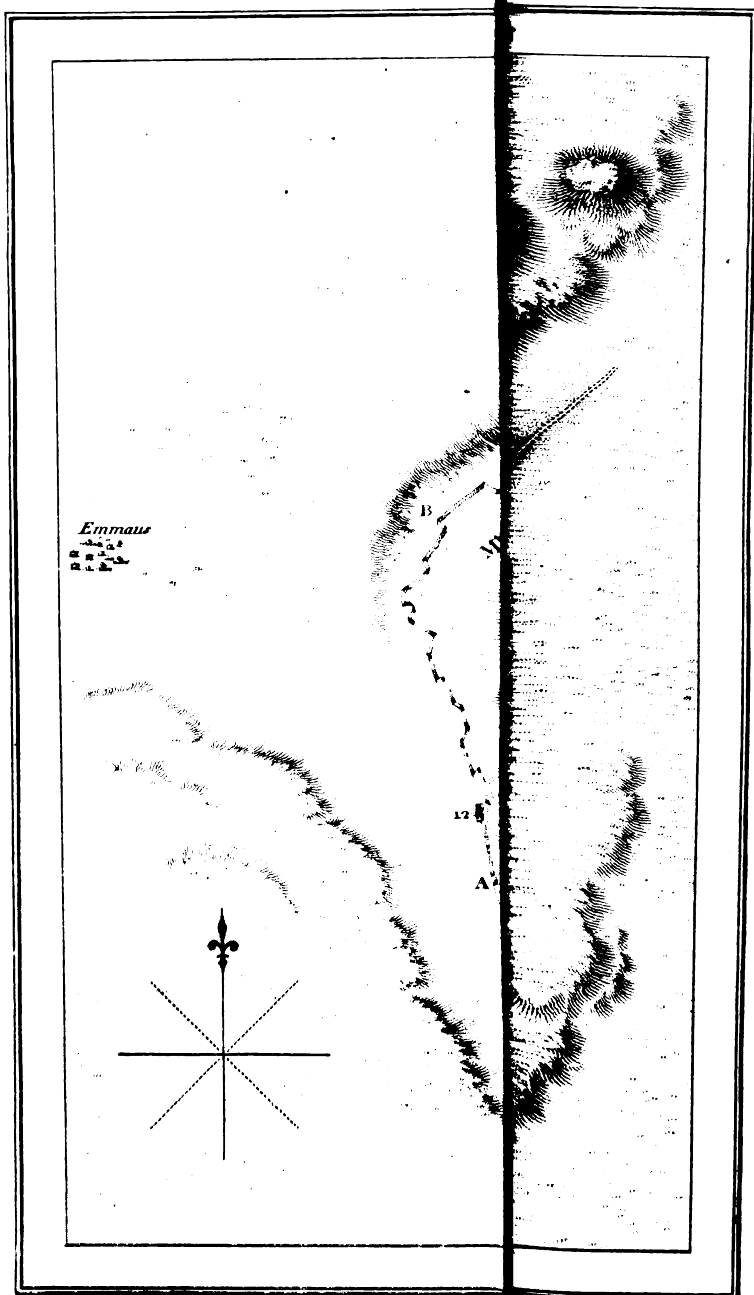
1. Besides Mount *Hermon*, on the northern frontier, which was a branch of Mount *Lebanon*, as we have seen, there was another, midland, which lay to the south of Mount *Tabor*, not far from *Nazareth*, Ps. lxxxix. 12. celebrated for its copious dews, Ps. cxxxiii. 3. "We were sufficiently instructed of this by experience," says that intelligent traveller, *Maundrel*, "our tents being wet with it, as if it had rained all night." (March 22,) p. 74.

2. From the eastern end of *Lebanon* also, branched off a southern ridge, which inclosed "the land of *Mizpeh*," called also "the land of *Gilead*," from the convention made there between *Jacob* and *Laban*, his father-in-law. Gen. xxxi. 48. Hence, *Ramoth Mizpeh*, Josh. xiii. 26, appears to be the same as *Ramoth Gilead*, Josh. xx. 8; which latter name at length superseded the former.

3. A considerable *Geographical* difficulty, which has greatly embarrassed commentators, may be easily removed by a slight alteration of the arrangement of the translation: thus:

"When the *Midianites* from the east had crossed the river *Jordan*, to invade the western tribes, *Gideon*, who followed them from *Gilead*, by the Divine command, dismissed the greater part of his army by proclamation: "Whosoever, from Mount *Gilead*, is fearful and afraid, let him return [home], and depart




Emmaus
B
A
12

early. So there returned [home] twenty-two thousand of the people." Judges vii. 3. The present translation is: "Whosoever is fearful or afraid, let him return and depart early from Mount *Gilead*. And there returned of the people twenty and two thousand." To solve the difficulty of departing *from* Mount *Gilead*, another mount of the same name has been introduced on the west of *Jordan*, of which there is no trace; or the word "*Gilead*" has supposed to have been a corruption of *Gilboa*; near which the armies were encamped, equally unfounded. See *Wells*, Vol. II. p. 297.

JERUSALEM.

The metropolis of the prerogative tribe of *Judah*, is frequently styled in Scripture, "*the Holy City*;" Isa. xlviii. 2; Dan. ix. 24; Neh. xi. 1; Matt. iv. 5; Rev. xi. 2; &c.: because "THE LORD chose it out of all the tribes of *Israel* to place *his name* there," his temple, and his worship; Deut. xii. 5; xiv. 23; xvi. 2; xxvi. 2; &c. And to be the centre of union in religion and government, for all the tribes of the commonwealth of *Israel*. Psalm cxxii. 3—5.

It was also held in high veneration by the Gentiles. *Herodotus*, who visited *Palestine*, calls it "the great city of *Cadytis*;" and represents it as "little inferior to *Sardis*," in his opinion. B. 2 and 3. Here Καδυτις is evidently taken from the Syriac, קדותא, *Kadutha*, signifying "the holy," from the Hebrew, קדשה, *Kadushah*, "holy;" which is found inscribed on ancient *Jewish* shekels; ירושלם קדשה, *Ierusalem Kadushah*, "*Jerusalem* the Holy." See *Polyglott Bible; Walton's* Apparatus; De Siclorum Formis, p. 38.

The original name of the city was *Salem*, signifying "peace." And "*Melchizedek*, King of *Salem*," in *Abraham's* days, was also "Priest of THE MOST HIGH GOD." Gen. xiv. 18. He was probably a *Jebusite* prince; for *Jerusalem* is called *Jebus*; 1 Chron. xi. 4. And the strong fort of *Jebus*, built on Mount *Sion*, was contiguous thereto. When *David* reduced this fort, he built "the city of *David*" around it, and downwards, as far as *Millo*, or the House of Assembly; 2 Sam. v. 6—9. And thus formed the southern quarter of the city; which became gradually united with the ancient city, in the western quarter, on the hill called *Acra*, by *Josephus*; to which the eastern quarter was

added, by the erection of the Temple on Mount *Moriah*, by *Solomon*. The northern quarter was a suburb, called *Bezetha*, by *Josephus;* on which afterwards was built *Herod's* palace, in our Saviour's time. The united city was called IERUSALEM, signifying, "*they shall see peace* *:" probably, from the name given by *Abraham* to Mount *Calvary*, after his intended sacrifice of his son *Isaac;* IAHOH JIREH, "THE LORD *will see*," or "*provide*:" alluding to his ambiguous answer to *Isaac:* "GOD *will see (*or *provide) for himself—the lamb for a burnt offering, my son.*" At which time, probably, was revealed to him the all-sufficient sacrifice of "THE LAMB OF GOD, *that taketh away the sins of the world;*" nearly on the same spot, two thousand years after.

The name of the whole mountain, on the several hills and hollows of which the city stood, was called *Moriah*, or "Vision;" because it was high land, and could be seen "*afar off*," especially from the south. Gen. xxii. 2—4. Afterwards, the name was appropriated to that part on which the Temple was erected; where "THE LORD appeared to *David*." 2 Chron. iii. 1; 2 Sam. xxiv. 16, 17.

This mountain is described by travellers as a rocky, limestone hill, steep of ascent on every side, except the north. It is surrounded on the other side by a group of hills, in form of an amphitheatre. Psalm cxxv. 2. On the east, by *Olivet*, or the Mount of Olives, fronting the Temple, and stretching from north to south about a mile in length. It has three tops; on the middle and highest stands the little chapel of the *Ascension*, marking the spot of our Lord's Ascension, according to *Sandys*, p. 155; which was "a Sabbath day's journey," or about a mile from the city, in the district of *Bethany*. Acts i. 12; Luke xxiv. 50.——*Maundrel* reckons the highest part of Mount *Olivet* to be the northern, about two furlongs from the chapel of the Ascension. P. 105.

* There seems to be an elegant allusion to this signification, in OUR LORD'S mourning over *Jerusalem:*

"O that thou hadst known, even thou at least in this thy day [of respite,] the things that belong to thy *peace!* But now are they *hidden* from thine eyes: for the days shall come upon thee, when thine enemies shall cast a trench around thee, and shall encompass thee, and hem thee in on every side, and level thee, and thy children within thee, to the ground; and shall not leave in thee one stone upon another; because thou knowest not the season of thy visitation [by THE DAY SPRING *from on high.*] Luke xix. 41; i. 78.

Between *Olivet* and the city, lay the valley of *Kedron*, about five furlongs wide in the broadest part, according to *Josephus*. Through it ran in the "winter" season the "brook" *Kedron*, (χειμαρρον, John xviii. 1.) which was dry in summer. Its course was southerly, through the valley of *Jehosaphat*, anciently *Shaveh*, or "King's Dale," where *Melchizedek* entertained *Abraham*. Gen. xiv. 17. Here *Absalom* reared for himself a pillar, or obelisk, 2 Sam. xviii. 18; which *Josephus* reckoned two furlongs from the city; Ant. 7, 10, 3; and which is still shewn to travellers.

On the south side lay the mount of *Corruption*, where *Solomon*, in his declining years, built temples to *Moloch*, *Chemosh*, and *Ashtaroth;* 1 Kings xi. 7; 2 Kings xxiii. 13: whose rites and worshippers are thus *graphically* described by the deep-learned *Milton:*

"First *Moloch*, horrid 'king,' besmeared with blood
Of human sacrifice, and parents' tears;
Though for the noise of drums and timbrels loud,
Their children's cries unheard, that past thro' fire
To his grim idol. Him the *Ammonite*
Worship'd in *Rabba* and her watery plain,
In *Argob* and in *Basan*, to the stream
Of utmost *Arnon*. Not content with such
Audacious neighbourhood, the wisest heart
Of *Solomon* he led by fraud, to build
His temple right against the Temple of God,
On that *opprobrious Hill;* and made his grove
The pleasant valley of *Hinnon*, *Tophet* thence,
And black *Gehenna* called, the type of Hell.
"Next *Chemos*, the obscene dread of *Moab's* sons,
From *Aroer* to *Nebo*, and the wild
Of southmost *Abarim;* in *Hesebon*
And *Horonaim*, *Seon's* realm, beyond
The flowery dale of *Sibma* clad with vines,
And *Eleale* to the *Asphaltic* pool.
Peor his other name, when he enticed
Israel in *Sittim*, on their march from *Nile*,
To do him wanton rites, which cost them woe.
Yet thence, his lustful orgies he enlarged
Even to that *hill of Scandal*, by the grove
Of *Moloch* homicide; *Lust* hard by *Hate:*
Till good *Josiah* drove them thence to hell.
"With these, came they who from the bordering flood
Of old *Euphrates*, to the *brook* that parts
Egypt from *Syrian* ground, had general names
Of *Baalim* and *Ashtaroth;* those male,
These feminine:———

> For those, the race of *Israel* oft forsook
> Their LIVING STRENGTH, and unfrequented left
> His righteous altar, bowing lowly down
> To *bestial gods;* for which their heads as low
> Bowed down in battle, sunk before the spear
> Of despicable foes. With these, in troop,
> Came *Astoreth*, whom the *Phœnicians* called
> *Astarte*, Queen of Heaven, with crescent horns;
> To whose bright image, nightly by the moon
> *Sidonian* virgins paid their vows and songs:
> In *Sion* also not unsung, where stood
> Her temple on the *Offensive Mountain*, built
> By that uxorious king, whose heart, though large,
> Beguiled by fair idolatresses, fell
> To idols foul." PAR. LOST, I.

This mount of *Corruption* was separated from the city by the narrow valley of *Hinnon*, or *Gehinnon;* Josh. xviii. 16; Jer. xix. 2; where the Israelites burnt their children in the fire to *Moloch;* Jer. vii. 31; xxxii. 35. Thence made the emblem of Hell, *Gehenna*, or the place of the damned; Matt. v. 22; Mark ix. 48; Matt. xxiii. 33, &c.

Towards the west, lay Mount *Calvary*, separated from the city by the ravine, or deep ground of *Goatha;* Jer. xxxi. 39. Afterwards called *Golgotha;* Matt. xxvii. 33.

The southern quarter, originally "the city of *David*," built on Mount *Sion*, *Josephus* calls the "*upper city;*" and "the house of *Millo*" was probably what he calls "the *upper market*," (ἡ ανω αγορα.) In process of time the upper city spread downwards into the winding hollow way, which he calls "the *cheese manufactory*," (τυροποιον,) and composed "the *lower city*," and the most populous part of *Jerusalem*, which formed an amphitheatre round the temple.

THE TEMPLE.

This magnificent and extensive structure occupied the northern and lower top of *Sion;* as we learn from the Psalmist: "Beautiful in situation, the delight of the whole earth, is Mount *Sion;* on her *north side* is the city of THE GREAT KING;" Psa. xlviii. 2: or "his *dwelling place* on *Sion;*" Psa. lxxvi. 2. The grandeur indeed of the situation is remarked by travellers:

"A fitter place for an august building," says *Maundrel*, "could not be found in the whole world than this area. It lies on the top of Mount *Moriah*, over against Mount *Olivet*, the

valley of *Jehosaphat* lying between both mountains. It is, as far as I could compute, by walking round it without, five hundred and seventy of my paces in length, and three hundred and seventy in breadth *: and one may still discern marks of the great labour that it cost to cut away the hard rock, and to level such a spacious area upon so strong a mountain. In the middle of the area stands at present a mosque of an octangular figure, [erected by the Caliph *Omar*, the next successor of *Mahomet*] supposed to be built upon the same ground where anciently stood the *Sanctum Sanctorum*. It is neither eminent for its largeness, nor its structure; and yet it makes a very stately figure, by the sole advantage of its situation." P. 106.

"As soon as we had entered the city again at *Sion* Gate," says *Maundrel*, "turning down on the right hand, and going about two furlongs close by the city wall, we were had into a garden lying at the foot of Mount *Moriah*, on the south side. Here we were shewn several large vaults, annext to the mountain on this side, and running at least fifty yards under ground. They were built in two isles, arched at top with huge firm stone, and sustained with tall pillars, consisting each of one single stone, and two yards in diameter. This might possibly be some under-ground work, made to enlarge the area of the temple: for *Josephus* seems to describe some such work as this erected over the valley on this side the temple," [by *Solomon;* Antiq. Jud. 15, 11, 3 †.] p. 100. He also notices an enlargement of the area on the north side, by breaking down the north wall, in after times. Bell. Jud. 5, 5, 1.

The height of the temple wall, especially on the south side, was stupendous. In the lowest places it was three hundred cubits (or 450 feet); and in some places more. The whole circuit of the wall was crowned above by a range of *porticoes*, or *cloisters*.

The royal southern portico reached in length from the east valley to the west. *Josephus* represents it as the noblest work

* Reckoning, with *Maundrel*, ten paces equal to nine yards, the length is 513 yards, the breadth, 333; and the whole circuit 1692 yards, or near an English mile. *Josephus* reckoned it, in *Solomon's* time, a square of four stadia in circuit; Ant. 15, 11, 3, p. 702.

† The reference of *Maundrel*, "Antiq. Jud. Lib. 15, cap. ult." relates to a subterranean passage made on the north side, from the tower of *Antonia* to the eastern gate of the temple, by *Herod*, as a retreat from insurrections in the city.

under the sun. For besides the great depth of the valley, so that one could not bear to look down from the top [of the wall] into the abyss, there was a very lofty portico erected thereon; so that if one looked down from the verge of its roof, joining both heights together, he would grow giddy, the sight not reaching to such an immeasureable depth. The roof of the portico was flat, and of considerable breadth, supported by four rows of pillars. And *Josephus* elsewhere relates, that *Cumanus* stationed a *Roman* band, or cohort *, thereon, to overawe the *Jews*, at the time of the Passover, shortly before the commencement of the war. *Bell. Jud.* 2, 12, 1.

This description of the *Jewish* historian may throw light upon an important passage in the account of our Lord's temptation; which is thus translated in our English Bible:

"Then the devil *taketh him up* into the holy city, and setteth him on a *pinnacle* of the temple," &c. Matt. iv. 5.

The original, παραλαμβανει, may more correctly be rendered, "*taketh along with him*;" or, as in the parallel passage of *Luke*, iv. 9.; ηγαγεν, "*led*" JESUS into the holy city; and placed him, επι το πτερυγιον του ἱερου, on "the extremity of *the wing*," or portico, of the temple; probably at the south-east corner of the roof; where the height was greatest above the valley; and tempted him "to throw himself down," and remain suspended in the air, by the angels of God, as a proof that he was THE SON OF GOD; and thereby give him, and the multitude, that "*sign from heaven*," of "*the Son of Man coming in the clouds*;" according to the signal prophecy of *Daniel*, vii. 13; which the Jews and their rulers so often required of *Christ*; they also "tempting him," like "their father, *the devil*:" who, on this occasion, probably appeared in a human form, or as "an angel of light." See Matt. xii. 38; Mark viii. 11; Matt. xvi. 1; Luke xi. 29; John vi. 30; 1 Cor. i. 22; John viii. 44; 2 Cor. xi. 14.

This was כנף, *Canaph*, "the *wing*" [of the temple], upon which the prophet *Daniel* foretold should stand "the *abomination of desolation*," or the *Roman* ensigns; Dan. ix. 27; as explained by our LORD; Matt. xxiv. 15: but unskilfully rendered, "the overspreading of abominations, he shall make it desolate," in the English Bible.

* A *cohort* usually consisted of 120 *Triarii*, 120 *Principes*, and 120 *Hastati*, besides *Velites*, or light infantry; about 480, or 500 men, in all. Ten *cohorts* made a *legion*.

That the *Devil* could not have led or conducted CHRIST to the top of the roof of "*the Sanctuary*," as imagined by some, is evident from the appropriation of the Greek word, ὁ ναος, thereto, both in the NEW TESTAMENT and in *Josephus*, as distinguished from το ἱερον, "*the temple*," or sacred enclosure in general. See Matt. xxiii. 35; xxvii. 51; John ii. 19—21, &c. Into the *Sanctuary* none but *the Priests* could be admitted: and *Josephus* observes, that even "*Herod* himself, who rebuilt it, was excluded, as not being a Priest;"—and that "the *Sanctuary* was built by the Priests," (του δε ναου δια των ἱερεων οικοδομηθεντος) Ant. 15, 11, 5, 6. But into the outer temple courts (το ἱερον) the Laity were admitted; John ii. 14; v. 14, &c.; Matt. xxiv. 1, &c. And further, the roof of the *Sanctuary* was inaccessible even to birds, being covered with gold spikes set very thick, to prevent them from pitching upon, and polluting it; as remarked by *Josephus;* Bell. Jud. 5, 5, 6.

The inner Temple, or Sanctuary, was the most splendid and magnificent part of the whole stately pile; covered all over at top with plates of gold; and so brilliant, that when the sun at his rising shone thereon, passengers at a distance could not bear to look at it; and it seemed like a mount of snow, being excessively white below the gold, or roof. Its dimensions were but small: sixty cubits in length and height, and twenty cubits in breadth. This was divided into two parts; the outer Sanctuary, forty cubits in length, and the inner, or most holy place, of twenty cubits square, separated from the outer by a rich vail. Into the latter, none but the High Priest entered once a year, on the great day of atonement. Heb. ix. 2—7; Bell. Jud. 5, 5, 5.

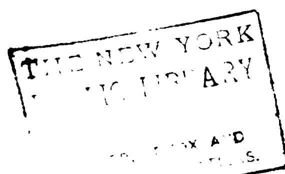
It is remarkable that the *Sanctum Sanctorum*, or "Most Holy Place," where was supposed to be the more immediate residence of the *Shechinah*, or Divine presence, was at the west end of the Sanctuary; pointing, as it were, towards Mount *Calvary*, the future scene of our Lord's crucifixion: perhaps by a typical reference thereto, as the true place of atonement for the sins of mankind; and also to distinguish it from the *Heathen* temples in the East, whose *Adyta*, or Oracles, usually fronted the East, or rising sun, the grand object of Heathen idolatry. Our "SUN OF RIGHTEOUSNESS *rose with healing in his wings*," or rays, in the West.

MOUNT CALVARY.

The modern city of *Jerusalem* has in some measure shifted its site, westwards. Mount *Calvary* was shut out of the walls of the old city as an execrable and polluted place, and appropriated to the execution of malefactors; where OUR LORD suffered "without the gate," Heb. xiii. 12; but, "nigh to the city;" John xix. 20. But since it was made the altar on which was offered up the precious and all-sufficient sacrifice for the sins of the whole world, it has recovered itself from that infamy, and has been always reverenced and resorted to with such devotion by all Christians, that it has attracted the city round about it, and stands now in the midst of Jerusalem; a great part of the hill of *Sion* being shut out of the walls, to make room for the admission of *Calvary*. And now, by an awful and disastrous reverse, the once holy hill of *Sion* is now become a dry and poor desert, flat and level, left by the *Turks* as a burial ground for all denominations of Christians to bury their dead! The Swedish traveller, *Hasselquist*, botanized there, and found only such plants as usually grow in waste grounds: *Allium pallens, veronense*, two sorts of garlick; *Betonica officinalis, betony* of the shops; *Biscutilla didyma*, buckler *mustard; Trifolium globosum, tomentosum, resupinatum*, three sorts of *trefoil; Ephedra distactica*, the shrubby *horsetail.*

Mount *Calvary* is eight hundred paces from the palace of *Pilate*, according to *Sandys;* and two hundred paces from the ancient Gate of Judgment, through which criminals were led to execution on *Calvary.* It stands in the west wall of the old city of *Jebus*, or *Salem*, and still resists the subversions of time, so many ages since the rest of the wall at that side has been demolished; a standing monument of our Lord's iniquitous judgment. *Nehemiah* called it the *Valley* Gate, Neh. ii. 13. leading into the valley of *Goatha*, Jer. xxxi. 39, or *Golgotha*, "the place of a skull," where the skulls of the criminals who had been executed upon *Calvary*, and buried there, rolled, or tumbled, in process of time, into the deep ground or valley beneath. Matt. xxvii. 33, &c. And where they usually gave criminals, going to execution, a stupifying potion of "wine mingled with myrrh." But this our Lord refused to take. Mark xv. 23.

The ancient city of *Jerusalem* was completely razed to the


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THE HOLY SEPULCHRE.

From Sandys.



Engraved by J. Bye, Camberwell near London.

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ground by the *Romans*, contrary to their usual policy, partly through resentment at the obstinate resistance of the *Jews*, partly through avarice, to discover the treasures of money and plate, which it was customary with them to bury. It may therefore appear a matter of surprise, how the situation of particular places could be ascertained amidst the general devastation. But, as ingeniously observed by Mr. *Townson:* "the city stood on very uneven ground, and was intersected, as well as encompassed, with *walls* of great strength and thickness; whose bases would still remain after the demolition of the city, and render the boundaries and contents of each division, or ward, more easily discoverable, than if the same calamity had befallen a city built in a plain. By such standing landmarks, the first Christians, who returned after the siege, preserved the memory of the most remarkable places, consecrated as it were by some transactions of our Saviour and his Apostles, to the present day."

CHURCH OF THE HOLY SEPULCHRE.

This magnificent structure, which covers the whole summit of *Calvary*, including under its roof both the place of crucifixion, and the holy Sepulchre, was built by the piety and munificence of the Empress *Helena*, the mother of *Constantine*, the first Christian Emperor. See *Sandy's* plates, p. 125, 126, 129.

In order to the fitting of this hill for the foundation of a church, the first founders were obliged to reduce it to a plain area; which they did by cutting down several parts of the rock, and by elevating others. But in this work care was taken that none of those parts of the hill, which were reckoned to be more immediately concerned in our blessed Lord's passion, should be altered or diminished. Thus, that very part of *Calvary* where they say Christ was fastened to, and lifted upon his cross, is left entire; being about ten or twelve yards square, and standing at this day so high above the common floor of the Church, that you have 21 steps, or stairs, to go up to its top. And the *Holy Sepulchre* itself, which was at first a cave hewn into the rock under-ground, is now, as it were, a grotto above ground.

The Church is less than one hundred paces long, and not more than sixty wide: and yet is so contrived, that it is supposed to contain under its roof twelve or thirteen sanctuaries, or places consecrated to a more than ordinary veneration, by being

reputed to have some particular actions done in them relating to the death and resurrection of Christ. As first, the place where he was derided by the soldiers; secondly, where the soldiers parted his garments; thirdly, where he was shut up, while they digged the hole to set the foot of the cross in, and made all ready for his crucifixion; fourthly, where he was nailed to the cross; fifthly, where the cross was erected; sixthly, where the soldier stood that pierced his side; seventhly, where his body was embalmed in order to his burial; eighthly, where his body was deposited in the sepulchre; ninthly, where the angels appeared to the women after his resurrection; tenthly, where Christ himself appeared to *Mary Magdalen*, &c. The places where these and many other things relating to our Blessed Lord are said to have been done, are all supposed to be contained within the narrow precincts of this church, and are all distinguished and adorned with so many several altars. *Maundrel*, p. 69.

The church is crowned with two *cupolas;* the eastern, called the temple of *Golgotha*, over the place of crucifixion; and the western, a stately *rotunda*, open at top, like the *Pantheon* at Rome; in the centre of which, and under the opening, stands the holy Sepulchre itself, having its entrance on the east side, hewn into the form of a small chapel, decorated with a small, elegant cupola, supported by polished pillars of porphyry. Within are two caves; the outer, or antichamber, about three yards square, capable of containing about a dozen persons; from thence, a narrow passage, about two feet square, leads into the inner, or tomb, where the body was laid, at the right side of the entrance, capable of containing about half a dozen persons. The inside of both is floored and lined with white marble *.

* This fabric was burnt down to the ground, in the year 1808, as we learn from the following account, in the *Christian Observer*, May 1809, p. 326.

"On the night of the 11th of October, the *Church of the Holy Sepulchre* was discovered to be on fire; and though every effort was made by the *Christians* residing at *Jerusalem* to stop the progress of the flames, it was found impossible; and about five or six in the morning, the burning *cupola*, with all the melted and boiling lead with which it was covered, fell in, and gave the building the appearance of a great smelting house. The excessive heat which proceeded from this immense mass of liquid fire, caused not only the marble columns which supported the gallery to burst, but likewise the marble floor of the Church, together with the pilasters and images in bas relief, that decorated the *chapel* containing the *Holy Sepulchre*, situated in the centre of the Church. Shortly after the massive columns that supported the gallery fell down, together with the whole of the walls. Fortunately, no lives were lost; only a few persons were hurt, or scorched by the fire.

This account of the Holy Sepulchre, collected from *Sandys*, *Maundrel*, and *Hasselquist*, throws considerable light on the circumstances of the Resurrection.

1. When the body of our Lord was interred in the inner vault, or tomb, *Joseph* of Arimathea, and his attendants, rolled a great stone to its entrance; which was afterwards " sealed" by the High Priests, and secured by a Roman " watch," or guard, " set," or stationed, in the antechamber. Matt. xxvii. 60—66. N.B. The Evangelist critically distinguishes between μνημειον " *the sepulchre*," in general, and ταφος, " *the tomb*," in particular: our translation confounds both.

2. The Evangelist calls the stone, " *great*," and Mark, " *very great*," xvi. 4. And it is so described by modern travellers. According to *Maundrel*, " it was kept a long time in the church of the Holy Sepulchre; but the *Armenians*, not many years since, stole it from thence by a stratagem, and conveyed it to a small chapel belonging to them, near *Sion* Gate; where they deposited it under the altar. It is two yards and a quarter long, one yard high, and as much broad. It is plaistered all over, except in five or six little places, where it is left bare, to receive the immediate kisses, and other devotions of pilgrims. P. 99. In its place a small stone is placed, to mark the spot where " the angel, who rolled away the stone" from the entrance, " sat upon it," in the antechamber, and terrified the watch, so that

" It is stated, (and the fact if true, is doubtless a very extraordinary one,) that the interior of the above chapel containing the Holy Sepulchre, and wherein service is performed, has not been in the least injured, although the same was situated immediately under the cupola, and consequently, in the middle of the flames: and that, soon after the fire had been extinguished, it was found that the silk hangings, wherewith it is decorated, and the splendid painting representing the resurrection, placed upon the Altar, had not received the least injury."

The fate of *the whole of the walls*, is remarkable, considering the great strength of the fabric, which *Sandys* in his time represented to be " of so strong a constitution, as rather decayed in beauty than substance." p. 132. A period, we trust, is thereby put to the disgraceful *mummeries*, *superstitions*, and *corruptions*, that have so long disgraced both the Holy Sepulchre, and the Church: Especially that *pious fraud* of kindling the *Holy fire* every *Easter Eve*, by a counterfeit miraculous flame, supposed to descend from heaven into the Holy Sepulchre; the process of lighting which is so well described by *Maundrel;* who adds, " 'Tis the deplorable unhappiness of the *Greek* and *Armenian* priests, that having acted the cheat so long already, they are forced now to stand to it, for fear of endangering the apostacy of their people, who fix their faith upon, and make their pilgrimages chiefly upon this motive. It is the opinion of these poor people, that if they can have but the happiness to be buried in a shroud smutted with this *celestial* fire it will certainly secure them from the *flames of hell!*" Maundrel, pp. 94—97.

"they became as dead," or were entranced at the brightness of his presence. Matt. xxviii. 2—4.

"Here," says the pious and eloquent *Sandys*, "thousands of Christians perform their vows, and offer their tears yearly, with all the expressions of sorrow, humility, affection, and penitence. It is a frozen zeal that will not be warmed with the sight thereof. And O that I could retain the effects that it wrought with an unfainting perseverance! Who then did dictate this hymn to my REDEEMER:

> "Saviour of mankind, *Man*, IMMANUEL,
> Who, sinlesse, died for sin, who vanquisht hell;
> The first fruits of the grave; who life did give,
> Light to our darknesse; in whose death we live;
> O strengthen Thou my faith, correct my will,
> That mine may thine obey: protect me still,
> So that the latter death may not devour
> My soul, sealed with thy seal. So in the hour
> When Thou, whose body sanctified this tombe;
> Unjustly judged, a glorious Judge shalt come
> To judge the world with justice; by that sign
> I may be known, and entertained for thine!" P. 130.

The circuit of the ancient city was considerably larger than of the modern, from which Mount *Sion* is excluded. *Nehemiah* has traced the course of the ancient wall and gates very accurately; chap. ii. 13—15: and again, in his account of the repairs of the wall; chap. iii. And *Maundrel* has given the dimensions of the modern city as follows;

	PACES
From *Bethlehem* Gate, to the N.W. corner, (B) on the right hand..	400
From that corner, to *Damascus* Gate	680
From *Damascus* Gate, to *Herod's*	380
From *Herod's* Gate, to *Jeremiah's* Prison	150
From *Jeremiah's* Prison, to the N.E. corner, next the Valley of *Jehosaphat*, (A)	225
From that corner, to St. *Stephen's* Gate	385
From St. *Stephen's* Gate, to the *Golden* Gate	240
From the Golden Gate, to the S.E. corner of the wall (D)...	380
From that corner, to the *Dung* Gate	470
From the Dung Gate to *Sion* Gate	605
From *Sion* Gate, to the S.W. corner of the wall (C)	215
From that corner, to *Bethlehem* Gate again	500
	4630

These 4630 paces in all, reduced to yards, in the proportion

of ten paces to nine yards, amount to 4167 yards, or near two English miles and a half. P. 110.

The annexed Map of *Jerusalem* is copied in its outline, from the Map of *Sandys*, p. 123; and accommodated to the ancient site, from careful comparison of *Sandys*, *Maundrel*, and *Josephus*, with SCRIPTURE.

EXPLANATION OF THE MAP OF JERUSALEM.

A. B. C. D.	The circuit of the modern city.
E. E.	The valley of *Kedron*.
F. F.	The valley of *Jehosaphat*.
G. G.	The valley of *Hinnom*.
H. H. H.	The three summits of Mount *Olivet*.
K.	The Mount of *Corruption*.
X. X. X.	Site of the old wall.

The figures denote,

1\. 1. The mosque and area of the Temple.
2\. The *High* Gate, Jer. xx. 2; or *Golden*, or *Beautiful*, Gate of the Temple; Acts iii. 2.
3\. The *Sheep* Gate, Neh. iii. 1; xii. 29; or *Stephen's* Gate.
4\. The Pool of *Bethesda*, John v. 2.
5\. *Pilate's* Palace, or Tower of *Antonia*, Matt. xxvii. 2; Acts xxi. 34.
6\. *Herod's* Palace. Luke xxiii. 7.
7\. The *Prætorium*, or Roman Tribunal, John xviii. 28.
8\. *Pilate's* Arch.
9\. Where *Simon* was pressed to bear the Cross, Matt. xxvii. 32.
10\. The *Valley* Gate, Neh. ii. 13; iii. 3.

(5–10: *The Dolorous Way.*)

11\. The Church of the *Holy Sepulchre*.
12\. *Bethlehem* Gate.
13\. The *Dung* Gate; Neh. iii. 13.
14\. The House of *Zebedee*, or of St. *John*; John xix. 27.
15\. The *Iron* Gate; Acts xii. 10.
16\. The House of *Mark*; Acts xii. 12.
17\. The House of *Thomas*.
18\. The Palace of the High Priest; John xviii. 24.
19\. *Sion* Gate, in the modern City.
20\. The Palace of *Caiaphas*; John xviii. 24.
21\. *David's* Sepulchre, and the *Cœnaculum*; Matt. xxvi. 18.
22\. The *Water* Gate; Neh. iii. 26; xii. 37.
23\. Where *Peter* wept; Matt. xxvi. 75.
24\. Where *Stephen* was stoned; Acts vii. 58.
25\. The *Old* Gate, Neh. xii. 39; or Gate of *Damascus*.
26\. Gate of *Ephraim*, Neh. xii. 39; Mark xv. 21.
27\. The *Serpent* Fountain; Neh. ii. 13.

28. The Fountain and Pool of *Siloam*, John ix. 7; formerly called *Shiloah*, Isa. viii. 6; and *Gihon*, 1 Kings i. 33; 2 Chron. xxxii. 30.
29. Northern Road from *Bethany*, on Palm Monday, by *Bethphage* and *Gethsemane*, Matt. xxi. 1.
30. Garden of *Gethsemane*; Matt. xxvi. 36; John xviii. 1.
31. The Tomb of *Lazarus*; John xi. 38.
32. The House of *Lazarus*; John xi. 31.
33. The Southern Road to *Bethany*, and the barren *Fig-Tree*; Mark xi. 12.

To the accuracy of *Sandys*, his judicious successor, *Maundrel*, bears the following honourable testimony:

"The descriptions and draughts of our learned, sagacious countryman, Mr. *Sandys*, respecting the remarkable places in and about *Jerusalem*, must be acknowledged so faithful and perfect, that they leave very little to be added by after comers, and nothing to be corrected." P. 68.

The environs of *Jerusalem* are annexed, Plate III. from careful comparison of other ancient and modern authorities; and the bearings of the principal places around, in the *Holy Land*, or bordering thereon.

ADDITIONAL OBSERVATIONS.

The accuracy, however, of the foregoing account of *Jerusalem* and its *Environs*, has been lately impeached, and upon strong grounds, by that universal and intelligent traveller, Dr. *Clarke*, who visited the Holy Land in 1801; as not agreeing with his own observations on the spot, nor with the ancient history of *Jerusalem*, as recorded in *Scripture* and in *Josephus*.

In the fourth volume of his *Travels in Europe*, *Asia*, *and Africa*, fourth edition, octavo, 1817, he has given a plan and description of *Jerusalem*, as it appeared to him, differing in several respects from the foregoing.

1. He disputes the supposed site of the *Holy Sepulchre* on Mount *Calvary*, within the walls of the modern City, as not being "a grotto above ground," from which the rock has been cut away on all sides, to a level with the floor of the Church of the Holy Sepulchre, according to *Sandys*, &c. but as actually built of mason work, cased with thick slabs of that beautiful *Breccia*, vulgarly called *Verd-antique* marble. This objection is not novel; it was urged, he observes, long ago, and thus contemptuously stated by the Monk *Quaresmius*:—Audivi non-

nullos *nebulones, occidentales hæreticos,* detrahentes de iis quæ dicuntur de jam memorato sacratissimo Domini nostri Jesu Christi *sepulchro;* et nullius momenti ratiunculis, *negantes illud verè esse in quo positum fuit corpus Jesu,* &c.—[quia] *monumentum Christi erat excisum in petrâ vivâ,* &c. illud vero *ex petris pluribus est compositum, de novo conglutinato cæmento.* Lib. v. cap. 14.

Even *Sandys,* with all his partiality, could not avoid censuring the absurdity of thus disguising the scenes of our Saviour's life and death, "so that these *natural* forms are utterly deformed, which would have better satisfied the beholder; and too much regard hath made them less regardable." And he happily applies to this subject the similar violation of the fountain of *Egeria,*

> In vallem Egeriæ descendimus, et *speluncas*
> *Dissimiles veris.* Quanto præstantius esset
> NUMEN AQUÆ, viridi si margine clauderet undas
> Herba, *nec ingenuum violarent marmora tophum.* *Juv.* Sat. iii.

We may further observe, that the cemeteries of the ancients were universally excluded from the precincts of their cities, and placed in their suburbs and gardens. Such was the tomb of *Joseph of Arimathea,* in which our Lord was interred, John xix. 41, 42. But the supposed Holy Sepulchre could not have been in the suburbs of the ancient city: it must lie within the precincts of the *lower City,* as it is called by *Josephus,* built upon Mount *Acra,* which was originally separated from the eastern, or *Temple quarter* on Mount *Moriah,* by a broad valley, which was afterwards filled up, during the reign of the *Asamoneans,* or *Maccabees,* and the top of *Acra* was then lowered below the level of the Temple. Bell. Jud. Lib. vi. 4, 1. To remove this weighty objection, *Sandys* traces a part of the old city wall (marked X. X. X. in the foregoing map) and the ancient *Valley Gate,* (10) so as to exclude the supposed *Calvary.* But this, as *Clarke* judiciously observes, "would contract the city so much on that side, as not to leave sufficient room for its population." This part of the wall, and the ancient gate, therefore, might have belonged rather to the primitive city of *Salem,* built on Mount *Acra;* which would afterwards become an inside wall of *Jerusalem,* when the city was enlarged by the addition of the Temple quarter, and of the *upper City,* or citadel of *David* on Mount *Sion;* which, according to *Josephus,* (ibid.) was opposite to

Mount *Acra*, and was much higher and steeper, and was separated from it by the valley called τυροποιων, *Tyropoeon*, which he says extended as far as the fountain of *Siloam*, (eastward) and that the houses on each side terminated in this valley. We have, therefore, strong grounds to suspect that the supposed mount *Calvary* is not the true; and that the pious empress *Helena*, who undertook her pilgrimage to *Jerusalem* in the *eightieth* year of her age, was imposed upon, as to the site of the Holy Sepulchre, by the fables of the monks; such as finding the place where *Adam's* head was discovered, the three crosses of Christ and his fellow-sufferers, &c.

2. The true Mount *Calvary*, *Clarke* suspects to be the southern part of Mount *Moriah*, called at present Mount *Sion;* which is indeed, excluded from the modern city, and made a burial ground. It probably was excluded from the ancient city likewise, and used for the same purpose. He represents the place of crucifixion, in his plan, as outside the present *Sion* gate. And that the supposed Mount *Sion* was a solitude in our Lord's days, we may further infer, from its summit being the traditional spot where *Peter* is said to have "*wept bitterly*" after denying Christ. Matt. xxvi. 75. The expression, εξελθων εξω, "*going forth outside*," strongly implies that he went out of the city.

3. The true Mount *Sion*, *Clarke* suspects to be that called by *Sandys* the Hill of *Offence*, facing Mount *Sion*, on the south, and the deep valley which he calls *Tophet*, or *Gehinnon*, to be in fact the valley of *Millo*, 2 Sam. v. 9. called *Tyropoeon* by *Josephus*, as we have seen: and this he infers, not only from its situation, so remarkably corresponding to Scripture and to *Josephus;* but also from the top of the mountain being still covered by ruined walls and the remains of sumptuous edifices, corresponding to "the bulwarks, towers, and regal buildings" of the citadel, and city of *David;* and further, from its base being perforated by numerous sepulchral caves hewn into the solid rock; upon which are Hebrew and Greek inscriptions; the former much obliterated; and among the latter he found several, deep graven in large letters on the face of the rock—THC AΓIAC CIWN. "*Of the Holy Sion;*" which seems to ascertain the fact, that this was indeed Mount *Sion* itself: and if so, the sepulchre will then appear to have been situate beneath the walls of the *citadel;* as was the case in many ancient cities; such as the *Grecian* sepulchres in the *Crimea*, belonging to the ancient

city of *Chersonesus*. And should this assumed position ever be confirmed, the remarkable things belonging to Mount *Sion*, such as the garden of the kings near the Pool of *Siloam*, where *Manasseh* and *Asa* were buried, 2 Kings xxi. 18; 1 Kings xv. 24; 2 Chron. xvi. 14; the sepulchres of the kings of *Judah*, 2 Chron. xxi. 20; xxiv. 25; the chiefest of the sepulchres of the sons of David, where *Hezekiah* was buried, 2 Chron. xxxii. 33, of which there are no traces in the hill now called *Sion*, will in fact be found here.

These sepulchres consist of a portico, and one or more inner chambers, hewn into the rock; and they are still situate in the midst of gardens. Among them, says *Clarke*, are we not warranted to look for the tomb of *Joseph of Arimathea?*

4. The real Mount of *Offence*, he suspects to be no other than Mount *Olivet*. This is not a novel opinion. *Brocardus* and *Adrichomius* formerly, supposed it to have been the northern top of *Olivet;* and *Maundrel* and *Pococke*, the southern top: and the deep-learned *Milton*, no mean authority, places the temple of *Moloch*, built by *Solomon*,

> ——— "*Right against the temple of* GOD,
> On that *opprobrious hill.*"——

This Hill evidently denotes *Olivet;* for *Zechariah* describes "the mount of *Olives*," as "before *Jerusalem*, on the *east*," xiv. 3. separated from Mount *Moriah*, on which the temple stood, by the valley of *Jehosaphat*. On this *mount* of "*corruption*," "*before Jerusalem*," *Solomon* built "*high places* for *Chemosh* the abomination or idol of *Moab*, and for *Moloch*, the abomination of the children of *Ammon*." 1 Kings xi. 7. And, likewise, for *Ashtoreth* the abomination of the *Sidonians*. 2 Kings xxiii. 13. probably on the summit of the three tops of *Olivet*. Of which, the middle, might have been that of *Ashtoreth;* "on the *right-hand* of the mount of *Corruption*," or south of the high place of *Moloch*, seated, perhaps, on the northern summit; and that of *Chemosh* on the southern *.

That the temple of *Ashtoreth*, or *Astarte*, occupied the middle summit, is highly probable from a curious discovery of *Clarke*, who found there a pagan *Adytum*, or *Crypt;* which he thus describes.

* To this *pagan Trinity*, may there not be an allusion, in the name of a place, called *Baal Shalisha*, "the triad *Baal*," and probably in that neighbourhood? 2 Kings iv. 42.

"We found upon the top, the remains of several works, whose history is lost. Among these were several subterraneous chambers of a different nature from any of the *cryptæ* we had before seen. One of them had the shape of a *Cone* of immense size, the vertex alone appearing level with the soil, and exhibiting, by its section at the top, a small circular aperture; the only entrance we could find to it: the sides extending below to a great depth, were lined with a hard red stucco, like the substance covering the walls of the subterraneous galleries which we found in the sandy isle of *Aboukir*, upon the coast of *Egypt*. This extraordinary piece of antiquity, which from its form, may be called a *subterraneous pyramid*, is upon the very pinnacle of the mountain. It might easily escape observation, although it be of such considerable size; and perhaps this is the reason why it has not been noticed by preceding travellers. This *crypt* has not the smallest resemblance to any place of *Christian* use or worship. Its situation upon the pinnacle of a mountain, rather denotes the work of *Pagans*, whose sacrilegious rites upon '*the high places*,' are so often alluded to in Jewish History:"——And its peculiar form of the cone, was a symbol of the *Paphian* Venus, which was the same divinity as the *Phenician Ashtoreth*.

It is remarkable, that when the good *Josiah* afterwards "brake in pieces the images or idols, and cut down the consecrated groves, he *filled their places* with *the bones of men*." 2 Kings xxiii. 14. He did not destroy the places, or *temples* themselves; he only *defiled* them with the greatest of all pollutions, by rendering them charnel-houses.

The remote antiquity of this conical temple of *Ashtoreth*, may be collected from the stucco, for the walls of the *cryptæ* near the *pyramids* of Egypt, and the surface of the Memphian *Sphynx*, which has remained so many ages exposed to all the attacks of the weather, may be instanced as still exhibiting the same sort of cement, similarly coloured, and equally unaltered. Clarke's Travels, Vol. IV. pp. 355—358. The worship of *Ashtoreth*, indeed, was introduced into *Syria*, even before *Abraham's* days; for we read of *Ashtoreth Karnaim*, (" the shining cow, two horned,") the name of a place where the *Assyrian* confederates smote the *Rephaims*, Gen. xiv. 5. *Solomon*, therefore, might have only revived the ancient pagan worship of this nocturnal Goddess, representing the Moon, and of *Chemosh* and *Moloch*,

the Sun. "*Lust* hard by *Hate*"—in the energetic language of *Milton*, thus distinguishing the libidinous orgies of *Chemosh* and *Ashtoreth*, from the "horrid" human sacrifices of *Moloch*.

The sepulchral caves at the base of the newly discovered *Sion* are not to be confounded with the "*Royal Caves*" noticed by *Josephus*, as situate northward of the city; which he represents as the sepulchres of *Helena*, queen of *Adiabene*. De Bell. Jud. Lib. V. Cap. 4. and are described as most magnificent, by *Maundrel*, *Pococke*, and *Clarke*.

The Greek inscriptions noticed on the former caves, may perhaps be assigned to the time of the *Maccabees*, or reigns of the *Asamonæan* princes, when the Greek language, under *Alexander's* successors, became prevalent all over *Asia*. Some of these caves, however, are ornamented with paintings on the walls, remarkably fresh in the colour, representing the *Apostles*, the *Virgin*, &c. with circular lines as symbols of glory around their heads. These evidently were formed since the Christian era; and *Clarke* thinks, after the dispersion of the *Jews* by *Adrian*, when the *Christian* Church became established at *Jerusalem*, until the reign of *Diocletian*. pp. 345, 346.

PHŒNICIA.

Phœnicia extended from the Gulph of *Issus*, where it bounded *Cilicia* on the north, along the coast southwards, to the termination of the ridges of *Libanus* and *Antilibanus*, near *Tyre*, where it met the border of *Palestine*. In breadth it only comprehended the narrow tract between the continuation of Mount *Libanus* and the Sea.

The principal cities of this maritime tract, were *Sidon* and *Tyre;* which rose to great power and opulence by their extensive commerce. The manufactures of *Sidon* are noticed by *Homer:* "Embroidered female dresses," Iliad VI. 289. "Silver cups, curiously wrought," Iliad XXIII. 743; Odyss. XV. 115—118; who styles the *Sidonians*, πολυδαιδαλοι, "skilled in many arts." And before his time, *Sidon* is styled "great," by *Joshua*, xi. 8; xix. 28. But she was afterwards eclipsed by "her daughter,"

TYRE.

This flourishing colony, from *Sidon*, was situated about eight hours journey from thence, southwards; and in process of time became " a *mart* of the nations:" Isa. xxiii. 3. *Tyre* also boasted of a very early antiquity: " Is this your joyous city, whose antiquity is of ancient days?" Isa. xxiii. 7. And the antiquity of both was recognized by *Xerxes;* when, in a general council of his chieftains, during the Grecian war, he made the King of *Sidon* sit down first, next to him the King of *Tyre*, and the rest, according to their respective ranks. *Herod.* B. 8.

The antiquity of *Tyre* has been variously estimated. *Herodotus* says, that the *Tyrians*, in his time, boasted of the antiquity of their temple and city, as founded 2300 years before, or about B.C. 2746; which is earlier than the date of the dispersion. On the other hand *Josephus* dates it too low, only 240 years before the foundation of *Solomon's* Temple, or B.C. 1267: whereas *Joshua* notices " the strong city of *Tyre*" about B.C. 1602. Probably the numeral letter denoting a thousand, was dropt from the text of *Josephus;* which, being restored, would give the date of the foundation of *Tyre*, B.C. 2267; or about 160 years before the foundation of *Salem;* which is probably correct; as the progress of colonization was later, the farther from the parent stock. *Sidon*, as the eldest of the sons of *Canaan*, probably was also the first settled in his allotted station.

Tyre was twofold, Insular and Continental. Insular *Tyre* was certainly the most ancient; for this it was which was noticed by *Joshua:* the continental city, however, as being more commodiously situated, first grew into consideration, and assumed the name of *Palætyrus*, or *Old Tyre*. Want of sufficient attention to this distinction, has embarrassed both the *Tyrian* Chronology and Geography. Insular Tyre was confined to a small rocky island, eight hundred paces long, and four hundred broad, and could never exceed two miles in circumference. But *Tyre*, on the opposite coast, about half a mile from the sea, was a city of vast extent, since many centuries after its demolition by *Nebuchadnezzar*, the scattered ruins measured nineteen miles round, as we learn from *Pliny* and *Strabo*. Of these, the most curious and surprising are, the cisterns of *Roselayne*, designed to supply the city with water; of which there are three still

entire, about one or two furlongs from the sea; so well described by *Maundrel*, for their curious construction and solid masonry. "The fountains of these waters," says he, after the description, "are as unknown as the contriver of them. According to common tradition, they are filled from a subterraneous river which King *Solomon* discovered by his great sagacity; and that he caused these cisterns to be made as part of his recompence to King *Hiram*, for the materials furnished by that prince, towards building the temple at *Jerusalem*. It is certain, however, from their rising so high above the level of the ground, that they must be brought from some part of the mountains, which are about a league distant; and it is as certain that the work was well done at first, seeing it performs its office so well, at so great a distance of time; the *Turks* having broken an outlet on the west side of the cistern, through which there issues a stream like a brook, driving four corn mills between it and the sea." From these cisterns there was an aqueduct which led to the city, supported by arches, about six yards from the ground, running in a northerly direction about an hour, when it turns to the west, at a small mount, where anciently stood a *fort*, but now a mosque, which seems to ascertain the site of the old city, and thence proceeds over the isthmus that connects insular *Tyre* with the main, built by *Alexander*, when he besieged and took it.

Old *Tyre* withstood the mighty *Assyrian* power, having been besieged, in vain, by *Shalmanasar*, for five years; although he cut off their supplies of water from the cisterns; which they remedied, by digging wells within the city. It afterwards held out for thirteen years against *Nebuchadnezzar*, King of *Babylon*, and was at length taken; but not until the *Tyrians* had removed their effects to the insular town, and left nothing but the bare walls to the victor, which he demolished.

What completed the destruction of the city was, that *Alexander* afterwards made use of these materials to build a prodigious causeway, or isthmus, above half a mile long, to the insular city, which revived as the Phœnix, from the ashes of the old, and grew to great power and opulence as a maritime state; and which he stormed after a most obstinate siege of five months. *Pococke* observes, that "there are no signs of the ancient city; and as it is a sandy shore, the face of every thing is altered, and the great aqueduct is in many parts almost buried in the sand." Vol. II. p. 81. Thus has been fulfilled the prophecy of *Ezekiel*:

"*Thou shalt be built no more: though thou be sought for, yet shalt thou never be found again!*" xxvi. 21.

The fate of Insular *Tyre* has been no less remarkable: When *Alexander* stormed the city, he set fire to it. This circumstance was foretold: "*Tyre* did build herself a strong hold, and heaped up silver as the dust, and fine gold, as the mire of the streets. Behold the Lord will cast her out, and He will smite her power in the sea, and she shall be devoured with fire." Zech. ix. 3, 4. After this terrible calamity, *Tyre* again retrieved her losses. Only eighteen years after, she had recovered such a share of her ancient commerce and opulence, as enabled her to stand a siege of fourteen months against *Antigonus*, before he could reduce the city. After this, *Tyre* fell alternately under the dominion of the Kings of *Syria* and *Egypt*, and then of the *Romans*, until it was taken by the *Saracens*, about A.D. 639, retaken by the Crusaders, A.D. 1124; and at length sacked and razed by the *Mamalukes* of Egypt, with *Sidon*, and other strong towns, that they might no longer harbour the Christians, A.D. 1289.

Maundrel, the most intelligent of modern travellers, who visited the Holy Land A.D. 1697, described it thus:

"This city, standing in the sea upon a peninsula, promises, at a distance, something very magnificent; but when you come to it, you find no similitude of that glory for which it was so renowned in ancient times, and which the prophet *Ezekiel* describes, chap. xxvi. xxvii. xxviii. On the north side, it has an old *Turkish* ungarrisoned castle; besides which, you see nothing here but a mere *Babel* of broken walls, pillars, vaults, &c.; there being not so much as *one entire house left!* Its present inhabitants are only a few poor wretches harbouring themselves in the vaults, and subsisting chiefly by *fishing:* who seem to be preserved in this place by Divine Providence, as a visible argument how God has fulfilled his word concerning *Tyre;* viz. that it should be as *the top of a rock; a place for fishers to dry their nets upon.*" Ezek. xxvi. 14. And *Hasselquist*, who saw it since, in A.D. 1751, observes:

"None of those cities which were formerly famous, are so totally ruined as *Tyre*, (now called *Zur)* except *Troy*. *Zur* now scarcely can be called a miserable village, though it was formerly *Tyre*, the queen of the sea! Here are about *ten* inhabitants, Turks and Christians, who live by *fishing*."

The *Phœnicians* in general, were the most extensive and ex-

perienced navigators of antiquity. Not confining themselves to the *Mediterranean* and *Euxine* Seas, they explored the coasts of the *Eastern* and *Atlantic* Oceans. We read of two voyages made by *Solomon's* ships, assisted by *Hiram*, the King of *Tyre's* subjects: the first from *Eziongeber*, a port on the *Idumæan* sea, to *Ophir*, whence they brought back gold, 1 Kings ix. 27, 28; 2 Chron. viii. 17, 18; and also "*Almug* trees, and precious stones," 1 Kings x. 11. The *Almug* tree is thought to be *Ebony*, or *Lignum vitæ;* and *Ophir* is judiciously conjectured by *Bruce*, to have been *Sofala* *, a district on the eastern coast of Africa, nearly opposite to the centre of the great island of *Madagascar*.

The second voyage, which employed three years, was made by their joint fleets, which sailed to *Tarshish*, or *Tartessus*, or the isle of *Cadiz*, lying between the two branches of the *Guadalquiver*, on the coast of *Spain*, whence they proceeded southwards, to the coast of *Guinea;* from which they brought back "gold, ivory, apes, and peacocks;" and from *Spain*, "silver;" 1 Kings x. 22; as well explained by *Gillies*, Vol. 1. p. 151—153; who also remarks, that they traded northwards, to the *Cassiterides*, or *Scilly* Islands, and the coasts of *Cornwall*, in *Great Britain*, for *tin*, which was used for hardening copper, to supply the want of *iron* or steel weapons; and even to the coasts of the *Baltic*, for the admired article of *Amber*, then deemed more precious than gold.

In *Pharaoh Necho's* time, the *Phœnician* mariners, employed on a voyage of discovery, setting out from the Red Sea, circumnavigated *Africa* in three years. *Herodot.* IV. 42.

ASSYRIA.

This country, in its most extensive signification, both in sacred and profane history, comprehended,

1. *Assyria* Proper, eastward of the *Tigris*, and south of *Taurus*. It was called in Scripture, *Kir:* "Have not I brought up the *Assyrians* from *Kir?*" Amos ix. 7. "The people of *Syria* shall go into captivity unto *Kir*." Amos i. 5. "And the king of

* From *Ophir* was derived Σωφιρα, *Sophira*, the name given by *Josephus*, Ant. 8, 6, 4: and from thence, *Sophala*, or *Sofala*, by a usual permutation of L and R. It was the country of the *Macrobian Ethiopians*, or *Abyssinians*, whom *Cambyses* invaded unsuccessfully, coveting their gold: the abundance of which is expressed by "the *gold chains* of their prisoners." *Herodotus*, III. 23. See *Gillies' History of the World*, Vol. I. p. 154.

Assyria took *Damascus*, and slew their king, *Rezin*, and carried the people captive to *Kir*." 2 Kings xvi. 9. And the name is still traceable in that country; the *Kar-duchian*, or *Kur-distan*, mountains; *Kiarè*, the name of their loftiest ridge, the large town of *Ker-kook*, and several other places of less note, in their prefixes, evidently retain the original word, *Kir*, with some slight deviation. This was a rich and fertile, though mountainous region; whence it was called by the Greeks, *Adiabene*, "impassable;" finely watered by the springs of the *Tigris*, the greater and lesser *Zab*, the *Diala*, and the *Mendeli*. Its capital city was *Nineveh*, on the east side of the *Tigris*, opposite to the modern city of *Mosul;* in lat. 36, 20, according to *Niebuhr*, Tom. II. Tab. XLV.

2. *Aram*, or *Syria*, eastward of the *Euphrates*. This was divided into two districts, the northern and the southern. The upper was called in Scripture, *Aram Naharaim*, "*Aram* between the two rivers;" and by the Greeks, *Mesopotamia*, of the same import. This was the country of *Nahor*, Gen. xxiv. 10; and of *Laban*, the Syrian, Gen. xxxi. 20; and of *Balaam*, the diviner, who came from "*Aram*, out of the mountains of the east," Numb. xxiii. 7; or from *Aram Naharaim*, Deut. xxiv. 4.

The lower part of this division was called *Padan Aram*, "the champaign *Aram*," Gen. xxv. 20; in which was *Haran*, Gen. xi. 31; called *Charran*, Acts vii. 2; and the city of *Nahor*, Gen. xxiv. 10, compared with xxvii. 43; to which *Abraham's* family first emigrated from the original settlement of the family at "*Ur*, of the Chaldees," situated near "the river" *Tigris*, and probably the same place as *Pethor*, *Peth-Ur*, or *Beth-Ur*, "the house of light," the residence of *Balaam*, and "the land of the children of *Balak's* people," or of his ancestors; whence this king of *Moab* sent for the diviner to curse *Israel*. Numb. xxii. 5. *Charran* is probably still recorded in *Charræ*, in the north-west of *Mesopotamia*, a city situated on an arm of the river *Chaboras*, which runs into the *Euphrates;* and noticed by the Roman writers, on account of the signal defeat of *Crassus*, and the Romans there, by the Parthians.

The whole of this northern district extended from Mount *Masius* *, to the wall of *Media* southwards, including all that fertile

* The upper region of *Mesopotamia*, between Mount *Masius* and *Taurus*, belonged to *Armenia*. Thus *Herodotus* observes, that boats descended from *Armenia, above Assyria*, to *Babylon*. Book I. p. 194.

tract between the two rivers, from their greatest divergence of one or two hundred miles, to their contraction, within twenty miles asunder; in the vicinity of *Bagdat*, the great modern capital, on the eastern bank of the *Tigris*, in lat. 33°, 20′; according to *Niebuhr*, Tom. II. p. 239.

The southern district was called, "the land of *Shinaar*," Gen. x. 10; xi. 2; or *Babylon*, "the land of *Nimrod*," Micah v. 6; and *Babylonia*, by the Greek and Latin writers. It reached from the wall of *Media*, or contracted the space between the two rivers about three hundred miles down to the *Persian* Gulph; never exceeding four-score miles in breadth. The river *Euphrates* ran through the ancient capital, *Babylon*, which lay about 60 miles below *Bagdat*, in lat. 32° 28′. *Niebuhr*, Tom. II. p. 206, Tab. XLI.

3. *Aram*, or *Syria*, westward of the *Euphrates*. This, in Scripture, was divided into *Aram Zobah*, which reached from the *Euphrates* to the north and east of *Damascus*, 1 Sam. xiv. 47; 2 Sam. viii. 3. And *Aram*, of *Damascus*, which lay to the south and west of the former, 2 Sam. viii. 5. These corresponded to the Upper *Syria*, north of Mount *Libanus*, including *Cœle Syria*, or the hollow valley between the two ranges of *Libanus* and *Antilibanus*, and the lower, or *Palestine Syria*, the Promised Land, and reaching southwards to the borders of Egypt. These were the proper boundaries of *Aram*, or *Syria* in general, according to its divisions; but *Syria* and *Assyria* are frequently used indiscriminately by the classic authors.

NINEVEH.

This capital of the *Assyrian* empire could boast of the remotest antiquity. *Tacitus* styles it, "Vetustissima sedes *Assyriæ*." Annal. 12, 13. And Scripture informs us, that *Nimrod*, after he had built *Babel*, in the land of *Shinaar*, invaded *Assyria*, where he built *Nineveh*, and several other cities. Gen. x. 11. Its name denotes "the habitation of *Nin*," which seems to have been the proper name of "that rebel," as *Nimrod* signifies. And it is uniformly styled by *Herodotus*, *Xenophon*, *Diodorus*, *Lucian*, &c. Ἡ Νινος, "the city of *Ninus*." And the village of *Nunia*, opposite *Mosul*, in its name, and the tradition of the natives*, ascertains the site of the ancient city, which was near

* In the mosque of this village, *Nunia*, is shewn the tomb of the prophet *Jonah* which is held in great veneration by the *Jews* at this day. *Niebuhr*, Tom. II. p. 286.

"the castle of *Arbela*," according to *Tacitus*, so celebrated for the decisive victory of *Alexander* the Great over the Persians there; the site of which is ascertained by the village of *Arbil*, about ten German miles to the east of *Nunia*, according to *Niebuhr's* map. Tab. XLV.

Diodorus Siculus, indeed, asserts, that *Nineveh* was built on the *Euphrates*, Lib. II.; but this must be a mistake; for *Herodotus*, I. 193; *Pliny*, VI. 13; and *Ptolomy*, p. 146; all agree that it was built on the *Tigris.* Such a combination of ancient and modern authorities against his single assertion, decides the question beyond a doubt. And it is rather strange, how so accurate a geographer and historian as Doctor *Gillies*, in his late *History of the World from Alexander to Augustus*, Vol. I. p. 57. could adopt the mistake of *Diodorus*, and imagine that there were two *Ninevehs*, the one on the *Tigris*, the other on the *Euphrates.*

He also adopts the opinion, that the former *Nineveh* was founded by *Ashur*, not *Nimrod;* following the translation of our English Bible:

"Out of that land *(Shinar)* went forth *Ashur*, and builded *Nineveh*, and the city of *Rehoboth* and *Calah*, and *Resen*, between *Nineveh* and *Calah;* the same is a great city." Gen. x. 11.

That this is incorrect, may appear from the following reasons:

1. The introduction of *Ashur*, the second son of *Shem*, into the account of the settlement of *Ham's* family, is rather irrelevant.

2. There is no evidence that *Ashur* at any time resided in the land of *Shinar;* he probably lived always in *Assyria*, which bore his name.

3. "The land of *Ashur*" is distinguished from "the land of *Nimrod*," or *Shinar*, in the prophecy of *Micah*, v. 6. where both are threatened "to be laid waste with the sword," in retaliation for the *Assyrian* and *Babylonian* captivities of the *Jews.*

4. The original verb יצא, *exivit*, "went forth," frequently denotes hostile invasion. See instances, 2 Sam. xi. 1; 2 Kings xxiv. 8; Ps. lx. 10; Isa. xlii. 13; Zech. xiv. 3. And the noun אשור, *Ashur*, put frequently for the land of *Assyria*, Gen. ii. 14; Numb. xxiv. 24, &c. is used elliptically for אשורה, "*to*," or "*into Assyria;*" both the affix, ה local, and the preposition, אל or ל, both signifying "*to*," or "*towards*," being often understood. Compare in the original, 2 Sam. x. 2. with 1 Chron. xiii. 13; and 2 Sam. x. 2. with 1 Chron. xix. 2, &c.

The passage, therefore, may more correctly be rendered, "Out of that land *(Shinar)* went forth *(Nimrod)* to (invade) *Assyria*, &c." or, "*into Assyria*," as in the margin of the English Bible; supported by the authorities of the *Targums* of *Onkelos* and *Jerusalem*, *Theophilus*, bishop of *Antioch*, and *Jerom;* and the most judicious moderns, *Bochart*, *Hyde*, *Marsham*, *Wells*, *Le Chais*, *Universal History*, &c.

Nineveh, at first, seems only to have been a small city, and less than *Resen*, in its neighbourhood; which is conjectured by *Bochart*, and not without reason, to have been the same as *Larissa*, which *Xenophon* describes as "the ruins of a great city, formerly inhabited by the *Medes*," Anabas. 3. and which the natives might have described as belonging *La Resen*, "to *Resen*."

Nineveh did not rise to greatness for many ages after, until its second founder, *Ninus* II. about B.C. 1230, enlarged and made it the greatest city in the world. According to *Diodorus*, it was of an oblong form, 150 stadia long, and 90 broad, and, consequently, 480 in circuit, or 48 miles, reckoning 10 stadia to an English mile, with Major *Rennel* *. And its walls were 100 feet high, and so broad that three chariots could drive on them abreast; and on the walls were 1500 towers, each 200 feet high. We are not, however, to imagine that all this vast enclosure was built upon: it contained great parks and extensive fields, and detached houses and buildings, like *Babylon*, and other great cities of the east, even at the present day, as *Bussorah*, &c.

And this entirely corresponds with the representations of Scripture: In the days of the prophet *Jonah*, about B.C. 800, it is said to have been "a *great city*, "an exceeding great city, of three days' journey," Jonah i. 2; iii. 3. perhaps in circuit; for 16 miles is about an ordinary day's journey for a caravan †. The *Jews*, at present, however, understand it in length, according to *Niebuhr*, Vol. I. p. 286, which seems to agree with the prophet's "entering into the city a day's journey," Jonah iii. 4. if it does not rather denote his going throughout the city, which was a day's journey in length; and this corresponds with the tradition of the natives, that the city extended from *Kadikend*

* By a more accurate calculation, made by the learned and ingenious Doctor *Falconer*, of *Bath*, nine Greek *stadia* were equal to one English mile, and 030185 decimals over. See his curious *Tables of Ancient Measures of Length*, Tab. I.

† *Rennel's Herodot*. p. 350.

to *Jeriudsjd*, two villages on the east of the *Tigris*, about two or three German miles asunder, of which *Niebuhr* reckons fifteen to a degree.

The population of *Nineveh* also, at that time, was very great. It contained "more than six score thousand *persons* that could not discern between their right hand and their left, besides much *cattle*," iv. 11. Reckoning the persons to have been infants of two years old and under, and that these were a fifth part of the whole, according to *Bochart*, the whole population would amount to 600,000 souls. The same number *Pliny* assigns for the population of *Seleucia*, on the decline of *Babylon*, VI. 26. *London* at present, which perhaps is the most populous city in the world, not excepting *Pekin*, in *China*, is not reckoned to exceed 800,000, by Major *Rennel*, *Herodot*. p. 341, 348.

The threatened "overthrow of *Nineveh* within three days," by the general repentance and humiliation of the inhabitants, from the highest to the lowest, was suspended for near 200 years, until "their iniquity came to the full;" and then the prophecy was literally accomplished, in the third year of the siege of the city, by the combined *Medes* and *Babylonians*; the king *Sardanapalus*, being encouraged to hold out, in consequence of an ancient prophecy *, That *Nineveh should never be taken by assault, till the river became its enemy*; when a mighty inundation of the river, swollen by continual rains, came up against a part of the city, and threw down twenty stadia of the wall in length; upon which, the king, conceiving that the oracle was accomplished, burnt himself, his concubines, eunuchs, and treasures, and the enemy entering by the breach, sacked and razed the city, about B.C. 606.

Diodorus also relates, that *Belesis*, the Governor of *Babylon*, obtained from *Arbaces*, the king of *Media*, the ashes of the palace, to erect a mount with them near the temple of *Belus*, at *Babylon*; and that he forthwith prepared shipping, and, together with the ashes, carried away most of the gold and silver, of which he had private information given him by one of the eunuchs who escaped the fire. Doctor *Gillies* thinks it incredible that these could be transported from *Nineveh* to *Babylon*,

* This was the more explicit prophecy of *Nahum*, 115 years before the destruction of *Nineveh*, "With an *over-running flood*, HE (THE LORD) will make an utter end of the place thereof," i. 8.—"The gates of *the river* shall be opened, and the palace shall be dissolved," ii. 6.

300 miles distant; but likely enough, if *Nineveh* was only 50 miles from *Babylon*, with a large canal of communication between them, the *Nahar Malka*, or "Royal River," p. 132. But we learn from *Niebuhr*, that the conveyance of goods from *Mosul* to *Bagdat* by the Tigris is very commodious, in the very large boats called *Kelleks;* in which, in Spring, when the river is rapid, the voyage may be made in three or four days, which would take fifteen by land, *Niebuhr*, p. 287.

The complete demolition of such immense piles as the walls and towers of *Nineveh*, may seem matter of surprise to those who do not consider the nature of the materials of which they were constructed; of bricks, dried or baked in the sun, and cemented with bitumen, which were apt to be "*dissolved*" by water *, or to moulder away by the injuries of the weather. Besides, in the east, the materials of ancient cities have been often employed in the building of new ones in the neighbourhood. Thus *Mosul* was built with the spoils of *Nineveh*. *Tauk Kesra*, or "the palace of *Chosroes*," appears to have been built of bricks brought from the ruins of *Babylon;* and so was *Hellah*, as the dimensions are nearly the same, and the proportions so singular. And when such materials could conveniently be transported by inland navigations, they are to be found at very great distances from their ancient place, much farther, indeed, than are *Bagdat* and *Seleucia*, or *Ctesiphon*, from *Babylon*. *Rennel's Herodot.* p. 377, 378.

BABYLON.

The city of *Babylon* was of a still earlier date than *Nineveh*. It began to be built at the same time as the tower of *Babel*, and both were left unfinished at the *confusion of tongues*. Gen. xi. 4—8.

The earliest notice of *Babylon* in profane history is, that *Belus* II. who is frequently confounded with *Belus* I. or *Nimrod*, built the tower of *Belus*, at *Babylon*, where he was buried, and had a temple dedicated to him, which the *Chaldeans*, or Babylonian priests, used for an observatory. And the astronomical observations which *Alexander* found at *Babylon*, and sent to

* Captain *Cunningham* remarked that at *Bussorah*, which is built of sun-dried bricks, after heavy rain, the falling of houses into the streets is no unusual sight. *Rennel's Herodot.* p. 749.

Aristotle, are said to have been continued for 1903 years back, which would bring their commencement to B.C. 2230, the most likely date of the accession of *Belus* II.

Herodotus, who visited *Babylon*, takes no notice of its founder, or of its antiquity; he only tells us, that it was principally improved by two queens, *Semiramis* and *Nitocris*, who strengthened its fortifications, guarded it against inundations, and improved and adorned it; and that one of the gates of Babylon was called the gate of *Semiramis*. *Nitocris* appears to have been the queen of *Nebuchadnezzar*, who was regent during his distraction, and completed those great works which he began; and *Semiramis* lived only five generations, or 166 years, before *Nitocris*, and was therefore most probably the wife of *Nabonassar*, king of *Babylon*, who began to reign B.C. 747. It is not indeed likely that *Babylon* should grow great till the decline of her rival *Nineveh*.

The testimony of *Herodotus*, which is of considerable weight, refutes the fiction of *Ctesias*, followed by *Diodorus* and *Justin*, that *Semiramis*, the builder of the immense walls of *Babylon*, was the wife of *Ninus* II. the second founder of *Nineveh*. *Moses Choronensis*, in his *Armenian* History, with more probability, relates, that "*Semiramis* built a city and palace in the most fruitful and pleasant part of *Armenia*, whither she resorted to spend the summer season, and resided the rest of the year at *Nineveh*." She might perhaps have contributed to finish the walls of *Nineveh* after her husband's death; for *Suidas* relates, that "*Semiramis*, the first *Assyrian* queen, walled *Nineveh* about, and called it *Babylon*, changing its name." Voce Σεμιραμις. But from what authority does not appear. The change of name is improbable.

The city of *Babylon* was originally built by *Nimrod*, along with the tower of *Babel*, on the eastern bank of the *Euphrates*. Gen. x. 10; xi. 4. At first, it was probably but small; but was afterwards enlarged and improved by *Belus*, *Semiramis*, *Nebuchadnezzar*, and his queen, whom *Herodotus* calls *Nitocris*, until it became the wonder of the world.

According to *Herodotus*, *Babylon* was a perfect square, each side of which was 120 stadia, and of course its circuit 480 stadia, the same as that of *Nineveh;* but its area was considerably greater. The walls were 200 royal cubits high, and 50 wide. On the top were erected small watch-towers, of one story high,

leaving a space between them, through which a chariot and four horses might pass and turn. In the circumference of the wall, at different intervals, were a hundred massy gates of brass, whose hinges and frames were of the same metal. The whole was surrounded by a wide and deep trench, full of water. Of the earth dug out of the trench bricks were made, which were baked in a furnace, and when laid, were cemented with hot bitumen.

This circuit of 480 stadia is reckoned "enormous and improbable," by Major *Rennel*, p, 353; and he prefers the lower reports of *Clitarchus*, who accompanied Alexander, 365 stadia; or of *Diodorus*, from *Ctesias*, 360 stadia, p. 340; supposing that the present numbers of *Herodotus* are corrupt, p. 363 *. But of this there is no evidence; rather the contrary. For *Pliny* and *Solinus* both agree with *Herodotus*, reckoning the circuit 60 Roman miles, at 8 stadia to a mile. And surely *Herodotus*, who visited *Babylon* above a century before *Clitarchus*, and near three centuries before the time of *Diodorus*, and is a more credible witness than *Ctesias*, is more to be regarded; especially as he visited it earlier, and therefore in a more unimpaired state; and appears to have surveyed it with much attention.

Indeed a strong presumptive argument of the fidelity of the report of *Herodotus*, is the sameness of the dimensions of *Nineveh* and *Babylon*. The distinguishing trait in *Nebuchadnezzar's* character was inordinate pride, which occasioned his humiliation. Dan. iv. 29—31. He wished to surpass *Nineveh*, the greatest city in the world; which contained $150 \times 90 = 13500$ square stadia, within its walls; but the walls of *Babylon* contained $120 \times 120 = 14400$ square stadia; or 900 more than the former. The walls too were twice as high; and if the

* The accounts of *Herodotus* and *Diodorus* are easily reconcileable. The circuit of the walls of *Nineveh* and *Babylon* were originally equal; each 480 stadia: but the haughty *Nebuchadnezzar*, in all the pride of conquest, *enlarged* the city, by taking in the western quarter of the city, beyond the river *Euphrates*, in which he built his famous Palace and Hanging Gardens, on the western side of the river, to correspond and vie with the *tower* of Babel on the eastern side. And this exactly corresponds with his arrogant boast, in Scripture: at the end of a *twelvemonth* (after his significant dream of the *holy watchers*, Dan. iv. 1—28) the king walked in the *palace* of the kingdom of *Babylon*. He spake and said: Is not this *Babylon the Great, that I have built for the house of the kingdom, by the might of my power, and for the honour of my majesty!* While the word was in the king's mouth, there fell a voice from heaven: O King *Nebuchadnezzar*, to thee it is spoken, *thy kingdom is departed from thee*, &c. Dan. iv. 29—37.

towers thereon were not as numerous, (only two hundred and fifty, according to *Diodorus)* it was only because the city was defended on the western side by deep and extensive morasses, which rendered also fewer gates and communications with the country necessary on that side. Thus, when *Alexander*, after his return from India, in order to avoid the evils foretold by the soothsayers, if he entered the city on the eastern side, wished to have entered by the west, he was compelled, by the marshes and morasses on that side, to relinquish the attempt: as we learn from *Arrian*, lib. 7. And of the principal gates of the city, we may collect from Herodotus, lib. 2; that the gate of *Ninus*, or *Nineveh*, fronted the north; the gate of *Chaldea*, the south; and the gates of *Semiramis*, *Belus*, and *Cissia*, or *Susa*, the east, proceeding from north to south *. See Rennel's Map of Babylon, p. 335.

The magnificence and splendour of Babylon, after its enlargement and improvement by *Nebuchadnezzar*, when it became one of the wonders of the world, is well expressed by his arrogant boast: "Is not this great *Babylon*, which I have built for the house [or capital] of my kingdom, by the might of my power, and for the honour of my majesty." Dan. iv. 30. It contained many streets, adorned with houses, three or four stories high; and these furnished with spacious parks and gardens. Among

* *Major Rennel*, in his Geography of *Herodotus*, p. 357, has thus ingeniously determined the positions of these gates.

"When *Darius Hystaspes* besieged Babylon, (Thalia, 155 et seq.) the *Belidian* and *Cissian* gates were [betrayed and] opened to him by *Zopyrus*, and the Babylonians fled for refuge to the temple of *Belus;* as we may suppose, the nearest place of security. The *Cissian* or *Susian* gate must surely have been in the eastern front of the city, as *Susa* lay to the east: and by circumstances the *Belidian* gate was near it; as the plan was laid that Persian troops were to be stationed opposite to these gates; and it was probable that matters would be so contrived, as to facilitate, as much as possible, the junction of the two bodies of Persian troops that were first to enter the city, as a kind of forlorn hope.

"It may also be remarked, that the gates at which the feints were made, previous to the opening of the *Belidian* and *Cissian*, were those of *Ninus*, *Semiramis*, and *Chaldea*. The first towards *Ninus*, or *Nineveh*, must have been, of course, to the *north;* and the *Chaldean*, to the *south:* and perhaps that of *Semiramis*, to the *north-east*, between the *Belidian* and *Ninian;* as that of *Cissia*, to the *south-east*, between the *Belidian* and *Chaldean:* as it is unquestionable, that the *Ninian* and *Cissian* gates, if not the *Chaldean*, were in the *eastern* division of Babylon, (since the countries from which they are respectively denominated, lie to the east of the *Euphrates)* it may be collected, that the attack was confined to that division alone. (And what army could invest a fortress 34 miles in circuit?) And if this be admitted, the *Belidian* gate, and temple of *Belus*, must have stood on the east side of the Euphrates."

its curiosities, the most celebrated were, 1. the tower and temple of *Belus*, on the eastern side of the Euphrates, which ran through the center of the city, from north to south; 2. opposite thereto, on the western side of the river, and with a *tunnel* of communication between them, running across under the bed of the river, stood the strong and spacious palace of *Nebuchadnezzar*, which formed the citadel; adjoining to this, 3. the *hanging gardens*.

1. The tower of *Belus* was of a pyramidal form, somewhat loftier, but less massy, than the pyramids of Egypt. It consisted of eight stories, of which the lowest was a stadium in breadth (or 500 feet) and it rose to the same altitude. On the summit, according to *Diodorus*, was erected a statue of *Belus*, 40 feet high: but *Herodotus*, when he visited Babylon, found no statue there. This intelligent traveller, however, was informed by the Chaldeans, that there formerly stood in the temple of *Belus* adjoining, a statue of solid gold, twelve cubits high, which was spared by *Darius Hystaspes;* but afterwards was taken away by *Xerxes*, who slew the priest that forbad him to remove it. Herod. 1. §. 182. Might not this have been the identical "golden image," made by *Nebuchadnezzar*, in all the pride of conquest, which he set up as an object of idolatrous worship to his subjects; recorded by the prophet *Daniel?* iii. 1. It was evidently distinct from the statue or image of *Jupiter Belus*, noticed by *Herodotus* and *Diodorus;* and was designed to represent *Nebuchadnezzar* himself, or the genius of his empire, according to *Jerom*, supported by *Daniel:*—"*Thou art this head of gold.*" Dan. ii. 38. This arrogant monarch, having made not only *the head*, but *the whole image of gold*, prefiguring the stability and permanency of his empire, in opposition to the succession of the four monarchies, signified by the image, in his dream, compounded of various metals. And the height of the image, twelve cubits, mentioned by the Chaldeans, well accorded with the breadth, "six cubits," noticed in Scripture; (perhaps, with the arms extended.) For the height, "sixty cubits," being evidently disproportionate to its breadth, must have included the elevation of the pillar, or pedestal, on which it stood.

Both the tower and the temple of *Belus*, (the former of which probably stood on the site of the tower of *Babel*, Gen. xi. 4.) were enclosed within a square court of two stadia in length, having gates of brass, which were still subsisting in the time of

Herodotus. It fronted, probably, the middle eastern gate of *Belus.*

2. The royal palace and citadel, opposite, on the west side of the river, were spacious, and strongly fortified. The former was a square of five stadia in circuit. It was contiguous to the citadel, called by *Berosus,* "*Borsippon,*" and by *Strabo,* "*Borsippa,*" which was a square of 15 stadia. These names are evidently derived from the *Punic,* "*Byrsa,* or *Bursa;*" or from the Hebrew, "*Bosrah;*" all signifying "a fortress:" and they are still retained, with some slight variation, by the natives: for *Niebuhr* observed a ruin on the west side of the river, which his guide called *Birs;* where, according to the tradition of the country, formerly stood *Nimrod's* palace; Tom. II. p. 236. And, according to *Beauchamp,* the Arabs call a great mass of ruins on the west, *Broussa,* or *Boursa,* which is separated by the river from another, which they call *Macloube,* or "Topsy Turvy." The latter evidently denoting the immense ruins of the tower and temple of *Belus.* They are described as about sixty yards high, flat at top, of an irregular form, intersected by ravines, worn by the rains. The whole could never be suspected of having been the work of human hands, were it not for the layers of bricks, which are found therein. They are fire-baked, and cemented with *zepht,* or bitumen; between each layer are found oziers. Here are found those large and thick bricks imprinted with unknown characters: specimens of which were presented to the Abbé *Barthelemi.* How exactly does this correspond to the builders of *Babel:* "Let us make brick, and burn them throughly. And they had brick for stone, and slime had they for mortar." Gen. xi. 3.

These ruins are very visible a league north from *Hellah,* which is an Arab town, built on the west side of the *Euphrates,* containing about ten or twelve thousand souls. This corresponds exactly with the description of the Turkish geographer, *Ibrahim Effendi:* "*Babel* is close to *Hellah;* and on the left hand (i. e. on the west) of the road, in going from *Hellah* to *Bagdat.* The latitude of *Hellah* is about 32°, 28′; which gives that of the tower of *Babel,* or *Belus,* 32°, 31′. *Rennel* Herodot. p. 350.

Around this vast pile of ruins, *De la Valle* observed the foundations of buildings, at the distance of 50 or 60 paces; but beyond that, to a great distance, the whole was a clear and even

plain. These probably were the range of buildings that formed the exterior circuit of the square in which the tower and temple stood, according to *Herodotus*, confirming the accuracy of his account: while the clear and level ground outside, proves that a great part of the area within the walls of the city was originally unbuilt, consisting of large parks and fields; and it is highly probable, that not more than a third of the whole enclosure was ever built upon; according to the conjecture of Major *Rennel;* whose ingenious remarks respecting the population of *Babylon*, as probably not exceeding that of *Nineveh*, or *Seleucia;* from the local circumstances of its situation, bounded by deserts on the west, and at a considerable distance from the sea, cutting off, or limiting, its supplies of provisions; with many other curious particulars, may be found in his 14th section, on *Babylon*, p. 335—388.

3. The celebrated *hanging gardens*, also contiguous to the royal palace, were built by *Nebuchadnezzar* to gratify his wife, who was a native of *Media*, a mountainous country, with the resemblance of her own, in the level country of Babylon. According to *Diodorus*, they formed a square of 400 feet, (about 3½ acres) supported by 20 walls, eleven feet asunder, and 50 cubits high, commanding an extensive view over the walls. Trees of various kinds were planted therein, some of considerable size; not less than eight cubits in girth, according to *Curtius*. And *Strabo* mentions a contrivance to prevent the large roots from injuring the superstructure, by building vast hollow piers, which were filled with earth to receive them. These trees, modern travellers inform us, have been perpetuated in the same place, notwithstanding the sinking of the terraces, by the mouldering of the piers that supported them. And *Niebuhr* observed there trees of a particular kind, some very ancient, which have been left untouched by the inhabitants; whereas, from the gulf of *Persia* to that neighbourhood, no other kinds are to be found than date and fruit trees.

The territory round *Hellah* at the present day, is composed chiefly of plains, whose soil is rich, and the river banks are bordered with willows. This circumstance reminds us of the pathetic mourning of the captive Jews:—

> " By the waters of *Babylon* we sat down and wept,
> When we remembered thee, O *Sion*.
> We hanged our harps upon the *willows*,

In the midst thereof. For there,
They that carried us away captive required of us
A *song*; and they that wasted us, required
Mirth :—' *Sing us one of the songs of Sion.*'
How shall we sing THE LORD'S *Song* in a strange land!"—Psalm cxxxvii.

Babylon rapidly declined during the *Persian* dynasty: *Darius Hystaspes* broke down the walls, and took away the gates, which *Cyrus* had spared. *Alexander* the Great designed to rebuild the temple of *Belus*, which had gone to decay; and actually employed ten thousand labourers for two months, in removing the rubbish; but the attempt was rendered abortive, by his premature death, in the flower of his age, and pride of conquest. *Seleucus Nicator*, his successor in the kingdom of *Syria*, dismantled and spoiled *Babylon*, to build *Seleucia* in its neighbourhood, to which he transplanted the inhabitants; and in *Strabo's* time, about the Christian Era, "the greater part of *Babylon* was become a desart:" which the *Parthian* kings converted into a park, in which they took the recreation of hunting, in *Jerom's* time, A.D. 340.

Thus were gradually fulfilled the predictions of Scripture:

"*Babylon*, the beauty of kingdoms, the glory of the pride of the Chaldeans, shall become as *Sodom* and *Gomorrah*, which God overthrew. It shall never be re-established, neither shall it be inhabited from generation to generation. The *Arab* shall not pitch his tent there, nor shall the shepherd make his fold there: the wild beasts of the desart shall lie there, and howling monsters shall fill their houses:—for her time is near to come, and her days shall not be prolonged." Isaiah xiii. 17—23.

MEDIA.

Media Proper was bounded by *Armenia* and *Assyria* Proper, on the west; by *Persia*, on the east; by the *Caspian* provinces, on the north; and by *Susiana*, on the south. It was an elevated and mountainous country, and from its *midland* situation between the *Caspian* Sea and the *Persian* Gulph, derived its name; forming also a kind of pass between the cultivated parts of eastern and western Asia. And thus, both from its geographical position, and from the temperature, verdure, and fertility of its climate, *Media* was one of the most important and interesting regions of *Asia*.

Into this country, the ten tribes, who composed the kingdom of Israel, were transplanted, in the *Assyrian* Captivity, by *Tiglath-pilesar* and *Shalmanassar*. The former prince, B.C. 740, carried away the tribes of *Reuben*, *Gad*, and *half Manasseh*, on the east side of *Jordan*, "to *Halah*, and *Habor*, and *Hara*, and to the river of *Gozan*." And his successor, B.C. 719, carried away the remaining seven and half tribes, to the same places, which are said to be "cities of the *Medes*, by the river of *Gozan*." Compare 1 Chron. v. 26; 2 Kings xvii. 6.

The ingenuity and skill of Major *Rennel* has traced these places by their present names. In the remote northern district of *Media*, towards the *Caspian* Sea, and *Ghilan*, he found a considerable river, named *Ozan*, separating *Media* Major, or *Al Jebal*, from *Media* Minor, or *Aderbigian;* but *Ozan* is evidently a variation of *Gozan*.

On a branch of this river there is found a city named *Abhar*, or *Habar*, which is reputed to be exceedingly ancient *: evidently *Habor*.

Bordering on the river itself, is a district of some extent, and of great beauty and fertility, named *Chalcal*, having in it a remarkably strong position of the same name, situated on one of the hills adjoining to the mountains, which separate it from the province of *Ghilan*. Allowing for the change of spelling and pronunciation in so many ages, this name is not far removed from *Halah*, or *Chalach*.

There is also a district named *Tarom*, or *Tarim*, bordering on the *Ozan*, and occupying the intermediate space between those of *Abhar* and *Chalcal*. This also is but little removed from *Hara*.

The geographical position of *Media* was wisely chosen for the distribution of the great body of the captives: for, 1. It was so remote, and so impeded and intersected with great mountains and numerous and deep rivers, that it would be extremely difficult for them to escape from this natural prison, and return to their own country; and 2. They would also be opposed in their passage through *Kir*, or *Assyria* Proper, not only by the native *Assyrians*, but also by their enemies, the *Syrians*, transplanted thither before them. And 3. The superior civilization of the

* Sir *John Chardin* notices *Abhar* as a small city, situated in a delightful country, well watered; where *Persic* is the first spoken in coming from the west; from thence eastward to India, all is *Persic;* to the west of it, *Turkish*.

Israelites, and their skill in agriculture, and in the arts, would tend to civilize and improve those wild and barbarous regions. And 4. They could safely be allowed more liberty, and have their minds more at ease, than if they were subject to a more rigorous confinement nearer to their native country.

A similar policy seems to have actuated the *Russian* Monarch, *Peter* the Great, in modern times. This sagacious politician transplanted the *Swedish* prisoners, taken at *Pultowa*, into the far distant region of *Siberia*, in order to civilize and improve it, by their superior knowledge and information; while the dreary and inhospitable desarts between, cut off all hope of escaping, and returning to their own country.

Major *Rennel* thinks, and with great reason, that both in the *Assyrian*, and also in the *Babylonish* captivity of the two remaining tribes, which composed the kingdom of *Judah*, by *Nebuchadnezzar*, the whole mass of the people was not carried away, but only the principal inhabitants, the *nobles*, *soldiers*, and *artisans*, the *merchants*, and men of *letters*, who might be dangerous if left behind, by creating disturbances; and who could be useful in their new settlements, by bringing with them their superior knowledge and skill in arts and manufactures. The *labourers*, and the *poorer* classes in general, who composed the great body of the people, must have been left behind; as the maintenance of them, through a great desart of 600 miles across, must have been impracticable, without a miraculous supply of provisions. And that some of the captives rose to high rank and estimation, even at *Nineveh*, *Babylon*, *Ecbatana*, and *Rages*, the seats of government in the *Assyrian*, *Chaldean*, and *Median* empires, is evident from the books of *Daniel* and *Tobit*. See *Rennel's Herodot.* sect. 15, for a fuller detail of the preceding remarks.

Nine years after the final destruction of the kingdom of *Israel*, the *Medians* revolted, and shook off the *Assyrian* yoke, B.C. 710. Upon this occasion, we may presume, the *Jewish* exiles contributed not a little to this revolution, by assisting the *Medes*; and thus retaliating upon their conquerors.

Dahak, or *Dejoces*, the first king of the *Medes*, after his election, built the celebrated city of

ECBATANA, NOW HAMADAN.

This lay near the north-west end of *Media*, and was remarkable for the coolness of its temperature; for which it was afterwards chosen to be the summer residence of *Cyrus*, and the succeeding kings of *Persia*. *Della Valle*, in his travels, observes, that the ink froze in the room in which he was writing; a sure proof of the great elevation of the soil, in the latitude of only 35 degrees; which is further proved from the great mountain *Elwend*, the *Orontes* of the Greeks, only a league distant, being constantly covered with snow. *Rennel's Herodot.* p. 178, 397.

RAGES, OR REY.

This was also formerly a great city in that quarter of *Media;* where many of the captive Jews resided, Tobit i. 14, remarkable for the defeat and death of *Arphaxad*, or *Phraortes*, son of *Dejoces*, by *Nabuchodonosor*, king of *Assyria*, B.C. 641, in the plain of *Ragau*, or *Rages*. *Judith* i. 5.

PERSIA.

This country was bounded on the west by *Media* and *Susiana;* on the south, by the Persian Gulph; on the north, by the great desart that lay between it and *Parthia* Proper; and on the east, by another still greater, that lay between it and the river *Indus*. Until the time of *Cyrus*, and his succession to the *Median* empire, it was an inconsiderable country, always subject to the *Assyrians*, *Babylonians*, or *Medes*. Its capital city was *Persepolis*, now *Chelminar;* lat. 30 degrees. In the neighbourhood of which, to the south-east, was *Passagardæ*, where was the tomb of *Cyrus*.

The ruins of *Persepolis* are remarkable, among other things, for the figures, or symbols, to be seen on the walls and pillars of the temple. Sir *John Chardin* observed there *Rams'* heads with horns, one higher, and the other lower, exactly corresponding to *Daniel's* vision of the *Medo-Persian* empire: the lower horn denoting the *Medes*, the higher, which came up last, the *Persians*. Dan. viii. 3. A winged *Lion*, with a crown on his head; alluding, perhaps, to the symbolical representation of the

Assyrian empire, by "a lion with eagle's wings;" denoting their ferocious strength and cruelty, and the rapidity of their conquests. Dan. vii. 4.

ST. PAUL'S VOYAGE FROM CÆSAREA TO PUTEOLI.

The course of this voyage related, Acts xxvii. in which the Apostle was shipwrecked on the Island of *Melite*, Acts xxviii. 1. has been much mistaken by the first Geographers and Commentators; and their maps of it erroneously constructed, in consequence of the vulgar error, that the island in question was the African *Melite*, or *Malta;* instead of the Adriatic *Melite*, or *Meleda*. This correction of the received Geography, we owe to the sagacious *Bryant;* and it has recently been established with much learning and ability, by a *Layman*, in a *Dissertation on this Voyage*, *Oxford*, 1817.—the ingenious Dr. *Falconer*, the Physician at *Bath*, who has also furnished a correcter map of the voyage. From his Dissertation chiefly, the following remarks are extracted, explanatory of the narrative.

Acts xxvii. 1, 2. St. *Paul*, with other prisoners, under the care of a Centurion of Augustus' band, embarked at *Cæsarea*, on board a ship of *Adramyttium*, intending to coast along *Asia Minor* to that place, which lay opposite to the Isle of *Lesbos*, in the *Ægean* sea, and still retains its name *Adramyttor*.

Ver. 3. Next day they reached *Sidon*, about a degree northward of *Cæsarea*, where they remained some days; the centurion *Julius* obligingly permitting St. *Paul* to visit his friends there.

Ver. 4. On their loosing from *Sidon*, they were compelled, by contrary winds, to relinquish their intention of coasting *Asia Minor*, and obliged to *sail under Cyprus*, (ὑπεπλευσαμεν) or on the south-side of the island, instead of the north-side, as they had at first proposed.

Ver. 5. Crossing the *Cilician* and *Pamphylian* sea, they arrived at *Myra*, a sea-port on the coast of *Lycia*.

Ver. 6. There they found an *Alexandrian* ship bound for Italy, laden with corn, on board which they embarked.

Ver. 7. After several days of slow sailing, they came over against *Cnidus*, a maritime city of *Caria;* but were driven by a contrary wind, probably from a northern quarter, under *Crete*, over against its eastern cape, *Salmone*.

Ver. 8. This they with difficulty weathered, (μολις παραγενο-

μενοι) and arrived at a place, on the southern side of the same Island, called *Fair havens:* there being no good ports on the northern side. *Δυσλιμενος ἡ Κρητη προς βορραν.* Eustath. ad Odyss. T.

Ver. 9. They did not reach *fair havens*, till the Fast was already past, and sailing already dangerous. The fast alluded to was the *Jewish* fast of expiation, which was observed on the tenth of the month *Tisri*, or the 25th of September, the day on which the Autumnal equinox was then computed to fall, after which stormy weather was usual. The repetition of *ηδη*, "*already*," intimates that a good while had elapsed after the autumnal equinox; St. Paul, therefore, advised them not to proceed

Ver. 10. On the voyage, at the risque of the cargo, and of the ship, and of their own lives also.

Vers. 11, 12. But the haven not being commodious to winter in, the pilot and the owner of the ship, and the majority of the crew, preferred the sailing from thence, and endeavouring to reach *Phenice*, a haven on the western coast of Crete, and there to winter. And the centurion followed their advice in preference to the Apostle's.

Ver. 13. Taking the opportunity of the south wind blowing softly; they weighed anchor, (*αραντες*) and coasted along *Crete;* probably about the middle of November.

Ver. 14. But not long after, a tempestuous wind, called *Euroclydon*, drove forcibly against it, (the Island) (*εβαλε κατ' αυτης ανεμος τυφωνικος ὁ καλουμενος Ευροκλυδων*). This word is compounded of Ευρος, "the *south-east* wind," and *κλυδων*, "a wave." And it is described by Virgil as raising innumerable waves:

> Aut ubi navigiis violentior incidit *Eurus*,
> Nosse *quot* Ionii veniant ad littora *fluctus*.
> Georg. ii. 107, 108.

It seems to be the wind called "*Hellespontine*" by *Herodotus*, which shattered and dispersed the fleet of *Xerxes*, in the Persian war, B. vii. 188. now called by mariners a *Levanter*, Rennel, Herod. p. 119. and was prevalent at this season of the year, as we learn from Columella, who reckons the fifth of the Ides of November, (Nov. 9.) the beginning of winter, when the south-east wind blows; and (Nov. 11.) the seas dangerous to sail on."

Ver. 15. And when the ship was hurried away with it,

(συναρπασθεντος) and not able to *face* the wind, (αντοφθαλμειν τῳ ανεμῳ) they let her drive.

Vers. 16, 17. And running under a little island called *Clauda,* nearly opposite to *Phenice,* they were scarcely able to come by the boat: which, taking up, or rather drawing close to the vessel, they made use of braces, *undergirding* the ship; or binding it round under the keel or bottom, with cables, to prevent the ship from splitting, and foundering, by the violence of the waves. An expedient alluded to by Horace,

> ——— Ac sine *funibus*
> Vix durare *carinæ*
> Possint imperiosius æquor.—Hor. Od. i. 14.

and practised in modern time. See *Anson's* Voyage. And now, the mariners, not knowing where they were, as neither sun nor stars had been visible for several days, ver. 20. and as these violent *Levanters* are apt to change their direction, (Shaw's Travels, p. 331.) fearing that they might be cast on the *Syrtis* [*major,*] dangerous quicksands on the coast of *Africa,* lying to the south-west of *Phenice,* in *Crete,* they lowered their sails, (χαλασαντες το σκευος) and so were driven, according to the nautical expression, under bare poles, at the mercy of the elements.

Vers. 18, 19. The tempest continuing, the next day they lightened the ship; and the third day they cast out, with their own hands, the furniture of the ship, (σκευην του πλοιου) and at length, after the tempest had affected them for several days, they lost all hopes of safety.

Vers. 21—26. In this distress, St. *Paul* blamed them for not following his advice; but encouraged them with assurance of being saved, in consequence of a divine vision; but foretold that they should be cast away upon a certain island.

Ver. 27. At length, on the *fourteenth* night after they had left *Crete,* they discovered that they were driven into the *Adriatic* Sea; perhaps from some abatement of the gloom, and some knowledge of the coast at its entrance, where it was narrowest.

The limits or boundaries of the *Adriatic* Sea, are accurately marked by the Ancient Geographers. *Strabo* says expressly, that it is bounded at its mouth by *Panormus,* and the port of *Oricum;* or by the *Japygian* Promontory of *Calabria,* and the

Ceraunian mountains of *Epirus*, which lie in about 40 degrees of north latitude, and upwards of 4 degrees to the north of *Malta*. And *Ptolomy*, so far from reckoning *Malta* to be an island of the Adriatic Sea, reckons it to be a part of Africa. And *Mela* speaks of *Corcyra* (half a degree to the south of the *Ceraunian* mountains) as being situate in the neighbourhood, [*vicina*] not *in* the Adriatic Sea.

Ver. 28. After much tossing about in this Sea, they apprehended at last that they were approaching the land, although the darkness of the night did not permit them to discover it. They, therefore, sounded repeatedly, and from the decrease of the depth, they judged that their apprehensions were well founded.

Ver. 29. Fearing, therefore, that they might fall on the rocks during the darkness of the night, when few or none could escape, they cast four anchors from the stern of the ship, and waited anxiously for the appearance of day. It is the oriental custom to cast anchors from the stern of the ship, not from the prow, as with the Romans, and with us. St. Paul's ship had two anchors on each side of the stern.

Vers. 30, 31. In this distress, the mariners anxious to save themselves, by quitting the ship, lengthened or loosened the rope at the stern that towed the boat, under colour of bringing it round to the prow of the vessel, so as to cast anchors from thence; and it was probably their attempting to do what was so unusual in the navigation of that age, that led St. Paul to suspect their real design, which he communicated to the Centurion and the soldiers, and they accordingly prevented, by cutting the towing-line of the boat, and setting her adrift.

Vers. 33—37. And while the day was approaching, St. Paul exhorted them all to partake of food; after fourteen days of abstinence, during which they had no regular meals, and were put to short allowance, on account of the long continuance of the storm, and the great number of passengers, as noticed before, verse 21. The whole number of persons on board was 276 persons. The Alexandrian corn vessels were very large. *Lucian* describes one of 180 feet in length, more than 45 feet wide, and 43½ deep. The tonnage of such a ship, according to the usual mode of calculation, would be 1938 tons, English feet measure. The vessel in which *Josephus* was shipwrecked, on his voyage

to Rome, and in the midst of the *Adriatic* sea likewise, carried about 600 souls. Vita § 3.

Ver. 38. And when they were satiated with food, (κορεσθεντες τε τροφης) they lightened the ship by casting out the *wheat* into the sea; which they had spared before.

Vers. 39, 40. And when the day came, they saw, but knew not the land; and discovered a creek with a strand, into which they wished, if possible, to thrust the ship, thereby to facilitate their escape. In consequence of this intention, they weighed their anchors, committed the ship unto the sea, loosed the rudder bands which directed the helm, to let it play freely, hoisted their main-sail to the wind, and made toward the shore.

Ver. 41. In the attempt to run the ship aground, she fell into a place where two seas met; by which we are to understand an eddy, or surf, which beat on the stern of the vessel, while the head remained fast aground, in which situation the ship soon fell to pieces; but the nearness of the shore, and the assistance afforded by the broken pieces of the wreck, providentially brought them all safe to land.

xxviii. 1. When they had reached the shore in safety, they found that the Island on which they were cast, was named *Melita.*

That this island was *Meleda*, near the Illyrian coast, not *Malta*, on the southern coast of Sicily, may appear from the following considerations.

1. It lies confessedly in the *Adriatic* sea, but *Malta* a considerable distance from it.

2. It lies nearer the mouth of the *Adriatic* than any other island of that sea; and would, of course, be more likely to receive the wreck of any vessel driven by tempests towards that quarter. And it lies N.W. by N. of the south-west promontory of Crete; and came nearly in the direction of a storm from the south-east quarter.

3. An obscure island called *Melite*, whose inhabitants were "barbarous," was not applicable to the celebrity of *Malta* at that time, which *Cicero* represents as abounding in curiosities and riches, and possessing a remarkable manufacture of the finest linen. Orat. in Verrem, iv. § 18, 46. And *Diodorus Siculus* more fully: "Malta is furnished with many and very good harbours, and the inhabitants are very rich; for it is full

of all sorts of artificers, among whom there are excellent weavers of fine linen. Their houses are very stately and beautiful, adorned with graceful eaves, and pargetted with white plaster. The inhabitants are a colony of *Phœnicians*, who trading as merchants, as far as the western ocean, resorted to this place on account of its commodious ports and convenient situation for maritime commerce; and by the advantage of this place, the inhabitants frequently became famous both for their wealth and their merchandize." Diodor. Lib. V. c. 1.

4. The circumstance of the viper, or venomous snake, which fastened on St. *Paul's* hand, agrees with the damp and woody island of *Meleda*, affording shelter and proper nourishment for such, but not with the dry and rocky island of *Malta*, in which there are no serpents now, and none in the time of *Pliny*.

5. The disease with which the father of *Publius* was affected, (verse 8.) *Dysentery* combined with *fever*, (probably intermittent) might well suit a country woody and damp, and probably, for want of draining, exposed to the putrid effluvia of confined moisture; but was not likely to affect a dry, rocky, and remarkably healthy island like *Malta*.

Ver. 12. After a stay of three months, they departed, probably about the beginning of March, in a ship of Alexandria, which had wintered also in the isle, and perhaps from similar stress of weather, and came from thence to *Syracuse*, where they spent three days, and thence proceeded to *Rhegium*, on the straits of *Messina*, and after a day's stay there, reached *Puteoli*, in two days, which was the usual port at which the corn ships from Egypt landed their cargoes. Here, also, *Josephus* and his shipwrecked companions landed, after they were taken up by a *Cyrenian* vessel, the year after St. Paul's voyage.

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